BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. XLII.] LONDON: SATURDAY, OCTOBER 17, 1857. [NEW SERIES.

Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

WORCESTER INFIRMARY.

CASE OF EPITHELIAL CANCER.

Under the care of H. BUDD, Esq.

[*Reported by* ERLIN CLARKE, M.B., *House-Surgeon.*]

W. W., aged 40, a chimney-sweeper, was admitted into the Worcester Infirmary September 5th, 1855, having received a severe contusion of the lower part of the right side of the abdomen, and of the right groin. The result of this was extensive sloughing of the cellular tissue of these parts, with considerable destruction of skin, extending as high as the level of the umbilicus; eventually all healed firmly without much contraction, and he was discharged January 25th, 1856. A small warty growth was observed on the scrotum; but as it gave him no inconvenience, and was quite inactive, he refused to have anything done for it, and returned to his occupation. Twelve months afterwards (January 3rd, 1857) he was re-admitted under Mr. Budd; he stated that the cicatrix of the old wound had been tender, and had ulcerated in parts on one or two occasions, but had readily healed under the use of simple applications till three months ago, when ulceration again attacked it, and has been spreading since. The wart on the scrotum is much larger than when last observed, and discharges a fœtid sanies. There is an ulcer in the right groin some three inches long by one and a half broad, with sharp and jagged edges, in some parts covered by an ash-coloured slough, and in others discharging sanies of very offensive smell; the femoral glands, much enlarged by morbid deposit, project as a large mass into the sore. During the next five months the ulcer continued to spread, giving him a good deal of pain, and frequently bleeding freely on slight motion of the parts, till it implicated the whole cicatrix of the former injury, with the upper part of Scarpa's triangle, laying bare the sheath of the femoral vessels, and cleanly dissecting the crural ring; the testes were nearly laid bare, and the left groin even took on the ulcerated action. On two occasions one of the superficial arteries gave way, when the hæmorrhage was restrained by pressure. The chlorides of lime and zinc, liquor arsenicalis, chlorate of potash, the mineral acids, and tannic acid, with opiates, were used either externally, internally, or both; and at one time the following lotion seemed very beneficial:

℞ Liquoris potassæ arsenitis ℥i; liquoris zinci chloridi (Burnett.) ℥i; infusi matico Oj. M.

The sore cleaned and even cicatrised at its outer edge for a short distance, but the improvement was but temporary.

June 3rd. The femoral sheath gave way, and the bare artery was seen pulsating; it was of an ashy hue, and the coats were softening, and it was apparent that in a few hours it must give way. It was now determined to tie the vessel, as a means of prolonging life, though the case was evidently hopeless. In spite of obvious objections, it was thought most desirable to secure the artery external to the abdomen; the scalpel was not required; the vessel was separated from surrounding tissues by a spatula passed under it, in doing which the softened coats were ruptured, and the profuse hæmorrhage being with much difficulty controlled by firm pressure on the bleeding points, two ligatures were applied; the leg was wrapped in cotton wool, and a full opiate given with brandy.

On June 7th, four days after the operation, the foot was cold and sphacelating, and on the following day the mischief had extended nearly to the knee; but by the 12th the temperature was nearly restored, and mortification was limited to the foot and quite the lower part of the leg. On this day there was some bleeding from the lower end of the artery, which was controlled by the tourniquet. On June 16th he died.

POST MORTEM EXAMINATION. The ligature had separated from the lower end of the artery, and very nearly so from the upper, the clot in which was soft and loose. The pelvic glands were quite free from any trace of disease, which was limited to the parts mentioned above, no secondary deposits being found in any region examined.

ST. MARY'S HOSPITAL.

TWO CASES OF CEREBRAL AFFECTION SIMULATING APOPLEXY IN FATTY DISEASE OF THE HEART.

Under the care of F. SIBSON, M.D., F.R.S.

[*Reported by* E. A. HART, ESQ., *late House-Surgeon.*]

CASE I. J. R., aged 46, an omnibus conductor, large and squarely built, with dark hair and complexion, having a dull and stupid aspect and general manner, was admitted into this Hospital. His speech was slow and somewhat thick, his sentences ill arranged, and his account of himself marked by a want of connection and lapsing forgetfulness. The story of himself and his wife showed that during the last few months he had greatly declined in cheerfulness, lost his appetite, diminished in weight, grown subject to melancholy, loss of memory, and become indisposed to make any physical exertion. He was inordinately drowsy, and tended constantly to fall into heavy sleep. He complained of occasional headache. On testing his power of speech more narrowly, it appeared that he could not pronounce the letter v without an effort, transformed n into d, and occasionally p into b. In all these instances, by recalling his attention to the pronunciation of the word, he could after a few efforts remedy the error. He was quite indisposed to any kind of physical exertion, and incapable of mental effort. The bowels were constipated. Other functions appeared tolerably normal. His treatment consisted in the application of the cold douche to the head frequently, enforced abstinence from excessive sleep, salt water friction, combined with the exhibition of small doses of sulphate of iron and the forty-eighth of a grain of strychnia. This treatment was persisted in for nearly one month with good effect. He became stronger and more active, in manner brisker, and in speech more neat. His articulation was not quite normal, but nearly so. There was a slight dragging of the left arm and leg on walking. He was apparently progressing favourably, when some misconduct became the cause of his leaving the Hospital. For a short time he continued as an out-patient, and appeared still to be doing well, the slight manifestations of disease last mentioned, however, continuing. At the end of a fortnight he was again admitted as in-patient, having fallen insensible in a fit in the morning, and remained comatose since its occurrence. Soon after admission, a second seizure occurred. It was of an apoplectic and convulsive character; the features were distorted, the respiration was laboured, jerking and irregular, and accompanied with clonic and general muscular spasm. A succession of these fits occurred during the following twenty-four hours, and at the end of that time he died.

The *post mortem* examination showed a very weak and flabby heart, fattily degenerated and affected with muscular atrophy; the brain had not suffered any evident pathological lesion, and the other organs of the body were equally free from apparent disease.

CASE II. J. B., a labourer, married, steady, not addicted to drinking, in very reduced circumstances, thin, haggard, with wild and restless expression, had presented nothing remarkable as to his health until about three weeks before admission. He ap-

peared to have been plunged into a state of debility and semi-starvation for some years; but this was chronic with him, and did not form a feature which his wife thought so unusual as to deserve a special mention. During the last three weeks he had appeared to be in a state of unusual depression and causeless excitement. He ate but little, felt very low and ill, was constantly restless, moody, and utterly sleepless. During the last week his wife said that his mind had occasionally wandered; and during the nights, never sleeping, he wandered objectless about the room. His manner was depressed and rather duller when admitted. He was placed in bed with warm bottles, ordered to take bark and ammonia, and ten grains of Dover's powder at bedtime. The nurse reported that he slept during a part of the night. The next morning he was suddenly observed to fall back when sitting up in bed; he became immediately senseless, deeply congested in the face; respiration appeared almost entirely to cease. On the arrival of the house-surgeon, at the end of about two minutes, the face was of a deep and livid purple hue, the veins in the neck turgid, the pulse imperceptible, respirations about six to the minute, sobbing and convulsive, as by a great involuntary effort. The jugular vein was immediately opened, but very little blood, of black colour, escaped. Marshall Hall's ready method was applied, but without avail.

In this case, also, at the *post mortem* examination there was no appearance of disease about any part of the brain. The heart was extremely small, fatty and atrophied; and the kidneys were granular.

Remarks. We incline to believe that such cases as these are not very uncommon. But they have not yet perhaps assumed the important place which they deserve in our pathological records of disease. They are cases of "brain seizure," dependent not upon disease of the brain, but on derangement of the circulation. The first case is particularly interesting, because the symptoms were throughout the case nearly identical with those of *ramollissement* of the brain, at first in the earlier and then in the latest stages of the disease. But the *post mortem* examination satisfactorily demonstrated that all the symptoms were due to functional disorder of the brain, dependent upon derangement of the circulating force, and probably to deterioration of the circulating fluid. The cardiac affection was not one of those marked organic changes of which the physical signs so easily recognised forcibly arrest the attention, but belonged to the class of atrophic diseases, of which the semeiology is very imperfectly made out, but of which the consequences are more fatal than in any others. The second case was equally an instance of cerebral affection, simulating apoplexy, the result of disease of the blood and weakness of the heart. Ill nourished and ill lodged—the qualities of the blood perverted, and the substance of the heart's wall atrophied—the cerebral circulation had evidently become deranged for some time before his admission. The ill nourished brain failed in its functions for weeks. At last the mischief, generated by a fault in the circulation, reacted in its turn upon the heart. Suddenly the heart lost its power of sending the blood through the lungs; the respirations became unfrequent; the blood sent to the brain remained unarterialised and black with poisonous carbon; and the end was a quasi-apoplectic death. This, at least, is the only interpretation which the comparison of the history with the records of the *post mortem* appearances suggested.

KING'S COLLEGE HOSPITAL:

TWO CASES OF APOPLEXY, WITH RECENT AND OLD CLOTS IN THE BRAIN.

[*From Notes by* A. Meadows, Esq., *House-Physician.*]

In contrast to the cases given above, we proceed to cite two others, in which the symptoms and history pointed to the presence of old coagulum in the brain, and to the disintegration of the cerebral substance so frequently associated therewith, as well as to a renewal of the effusion just before admission, and in which that diagnosis was confirmed by the appearances on dissection. It will be interesting to our readers to compare the symptoms in these very opposite conditions of the brain. The cases which follow are also of interest, from their close resemblance in general features, and in *post mortem* appearances, and from the well marked correspondence between the successive effusions of blood and the repeated seizures; the symptoms gradually improving as the clot contracted in size, but the patient never quite returning to the condition of health, in consequence, as it seemed from the dissection, of the morbid action going on around the clot. The functions interfered with indicated in either case pretty accurately the seat of the deposit. It will be seen that both cases also exhibited the visceral diseases so generally associated with apoplexy; viz., hypertrophy of the heart and granular disease of the kidneys.

Case I. Elizabeth M., aged 55, was admitted into the Hospital on October 30th, 1856, under the care of Dr. Todd. It seemed that, two months before, she was in a weak state of health, and suffering from headache. One night she was much frightened in the street, and, on reaching her home, fell into a fit, in which she lost all power of voluntary motion. There was not complete loss of consciousness, though her answers to questions were incoherent. From this fit she recovered perfectly, except that she had a feeling of numbness and occasional twitches in her legs. A month before admission, she began to complain of pain on the left side of the face and head. About this time, one day, while standing up, she staggered and fell heavily into a chair, and could not get up again. She did not lose consciousness, but found that the left side of the body was paralysed. She felt numbness and "pins and needles" on the same side. The power of motion began to return on the day after the attack, and gradually improved; so that, on the day before admission, she had been able to walk about the room and read. In the evening, however, she had another fit, in which she quite lost consciousness and power of motion. The pupils were equal, sluggish; the pulse 96. The legs occasionally started. There was some resistance to extension in the muscles of the left arm and leg.

Next day the rigidity of the left arm had disappeared. She moaned continually, but her breathing was not stertorous. The heart's action was tumultuous, but without murmur; the pulse was rapid and incompressible. She died in the afternoon.

Post mortem examination, made fifty-one hours after death, showed the convolutions flattened. There was a clot on the right side, involving the corpus striatum and optic thalamus. The cerebral substance was much softened around the clot. There was also a small patch of softening in the corpus striatum. In the left hemisphere, a much larger and more recent clot was found encroaching on the optic thalamus, and stretching nearly to the sulci. The arteries of the brain were studded with irregular patches of atheromatous deposit. Upon microscopic examination of the softened cerebral substance, a large number of cells, filled with a highly refracting substance, were found lying in rows among the capillaries, which were also slightly full of fatty particles, but were not diseased to such an extent as the arteries. The heart was hypertrophied, and its valves affected with atheromatous deposit. The kidneys were small, and their cortical substance was diminished in quantity.

Case II. James L., aged 45, a man of intemperate habits, was admitted on July 9th, 1857, under the care of Dr. G. Johnson. It seemed that, a fortnight before Christmas, he had come home one day complaining of giddiness and inability to walk, which had obliged him to leave off work. He sent for a medical man, and in the interval had an epileptoid seizure, in which all the limbs were spasmodically affected, especially on the left side. The face was not observed to be drawn. The fit was very severe, and lasted an hour and a half. He was bled, while in the fit, to sixteen ounces, and remained ill for about six weeks, being occasionally insensible during the time. After this he recovered sufficiently to follow his occupation—that of a carpenter.

Four months before admission, he had another attack of sudden insensibility, said to have been slighter than the last, but followed by an illness which lasted for about nine weeks, with much disturbance to consciousness, and left him with partial paralysis of the whole of the left side of the body. The right eye became inflamed during his illness, and has been similarly affected on all subsequent occasions when he has been excited or irritated. He began work again, but on July 7th was brought home insensible. No fit (epileptic) occurred during the progress of this attack. From this time till that of admission, he remained in a semi-conscious state. The motions and urine were passed unconsciously. He took little notice of what was going on, but would answer questions, though with much reluctance. The face was drawn to the right side, and the left arm and leg were paralysed. The muscles, however, of these limbs resisted extension. There was slight reflex action; no wasting of the muscles. The pupils were natural, and sensible to light; the bowels were obstinately constipated. The urine was albuminous, and contained small waxy casts; the pulse was

108, small. He was ordered to have ten grains of compound gamboge pill night and morning, and a senna draught every four hours.

He went on in the same way for the next three days. It was still necessary to give a purge every morning.

July 12th. It was noticed that the features were more drawn; the tongue was furred; the pulse full. The state of the back required the use of a water bed.

July 14th. About 7 P.M., he became quite insensible, with profuse perspiration, and yawning occasionally. The left pupil was contracted to about the size of a pin's head; the right natural. The pulse was not perceptible. There were no convulsions or distortion of the features. In this condition he remained for about an hour, and then died.

Post mortem examination, twenty hours after death, showed the muscles well developed and firm. The substance of the right hemisphere was much disorganised; upwards of twenty ounces of blood was found in this lateral ventricle. A clot was also found at the base of the brain, corresponding to the floor of the third ventricle. The convolutions were soft and pulpy. In the left hemisphere were remains of an apoplectic cyst, just external to the optic thalamus. The brain-substance around it had a yellowish tinge. The heart was somewhat hypertrophied. The kidneys were small and flabby; their surface was granular; the cortical portion was diminished in thickness.

ST. BARTHOLOMEW'S HOSPITAL.

PULSATING TUMOUR IN THE RIGHT THIGH—PROBABLY ANEURISM BY ANASTOMOSIS: TREATMENT BY REPEATED LIGATURE: RECOVERY.

Under the care of W. Lawrence, Esq.

[*From Notes by* W. Chippendale, Esq., *House-Surgeon.*]

C. A., aged 51, was admitted into Henry Ward on July 30th, 1856, having a pulsating tumour situated on the inner aspect of the right thigh, about two inches below Poupart's ligament.

He stated that the tumour appeared first about Christmas time, and that his attention was directed to it by hæmorrhage, which took place suddenly when walking. The tumour increased steadily in size, up to the time of his admission. There has been also a return of the hæmorrhage since he came into the Hospital.

He is an innkeeper, of temperate habits, and always enjoyed good health, till within the last nine months. He has purpurous spots about his body at various times. The conjunctivæ are slightly tinged, of a yellowish colour, and there is also a very perceptible enlargement of the liver. He has also had frequent hæmorrhage from his gums during the past twelve months.

October 18th. A ligature was placed tightly round the base of the tumour to-day, which it was necessary to draw with the greatest force that could be applied, in order to stop the pulsation which returned; very little hæmorrhage ensued.

October 25th. The ligature has cut its way around the base of the tumour to the depth of the third of an inch. The vitality of the centre is unimpaired. Mr. Lawrence applied another ligature to-day.

November 3rd. The supply of blood which appeared to have been wholly stopped by the last ligature, was not so, however. Two thirds of the tumour have separated all round, but the centre is still alive. Another ligature was applied.

November 8th. The tumour has now come away, leaving a healthy surface, which is closing in fast. The patient's general health is very much improved.

Original Communications.

ENCEPHALOID CANCER: REMOVAL BY OPERATION: LIGATURE OF THE CAROTID: RECOVERY.

By J. Seaton Smyth, Esq., Liverpool.

William Peacock, aged 48, presented himself at my public consultations about the close of July last, with a large, irregular, spherical tumour on the right side of the neck, extending from the lobe of the ear to within one and a half inch of the clavicle, projecting about three inches, of a dusky red colour, movable, and constantly attended with pain. His general appearance was cachectic, with the waxy-yellow, anæmic complexion, and other peculiarities of the cancerous diathesis; the arcus senilis was very distinct; his general health was good, and his appetite unimpaired. His antecedent history may be epitomised as follows. Whilst young, his mother died of cancer. He is not aware of having had any serious illness before puberty. He married at twenty, and had been the father of twenty-one children. He is a ship-carpenter by trade, and had always led an active, temperate life. At the age of twenty-five he became subject to epileptic fits, which continued with more or less frequency and severity for thirteen years, and were then superseded by a violent pain in the frontal region and otorrhœa. These symptoms all disappeared in November 1856, when he met with an accident; viz., a blow from the shaft of a car, to which he refers the origin of the tumour. The swelling was at first very gradual, but had latterly increased very rapidly. Before seeking my advice, he had acted upon that of many intelligent practitioners; poultices and strong embrocations were alternately recommended. When under my care in August last, iodide and bromide of potassium, arsenic, etc., were employed in turns; and *sanguinaria*, so much praised of late, had also a fair trial, and proved itself, as in all cases where I have used it, inefficacious. Iodine ointment, though only smeared over the surface with no friction, seemed to favour its growth. The tumour steadily increased in prominence and circumference, without losing its primitive rounded form. Pain became so urgent that he was almost worn out for want of sleep, and earnestly requested an operation. The neighbouring glands were not increased in size, nor apparently contaminated. Nothing but the depth and extent of the tumour contraindicated its removal, especially as general prostration of the system had become more apparent for some days.

On August 29th the operation was performed under the influence of chloroform. The first incision extended from behind the ear to the clavicle, and the second transversely. The separation of the skin, with its subjacent tissue, from the mass, was then proceeded with as rapidly and carefully as possible. But the surrounding and deep-lying structures were so involved that, before completing the dissection, and in order to save the patient's life from excessive hæmorrhage, I was obliged to ligature the carotid close to its bifurcation with the subclavian. The difficulties of this proceeding were amply compensated for by the very trifling subsequent hæmorrhage.

However inviting, I shall not dwell longer upon the operation, but proceed rather to describe the position and appearance of the tumour. It rested upon the splenius, the sterno-hyoid, the omo-hyoid, and the scaleni muscles, bounded behind by the trapezius, above by the sterno-mastoid, which was implicated for a great part of its extent, and required removal.

The tumour—a beautiful specimen of encephaloid—weighed about two pounds: was of a dark mottled purple colour, placenta-like, spongy, and easily torn. Infusion of arnica was used internally and externally after the operation.

The patient progressed favourably until the fifth day, when there was a slight attack of paralysis, followed by a difficulty of deglutition, speech, and hearing. These, however, yielded, after a few days, to belladonna. He was able to sit up on the tenth day, to go out on the fourteenth, and to walk a distance of half a mile on the twenty-first, since then his recovery has been uninterrupted.

Remarks. In my description of this case I have studied brevity, having scarcely glanced at the various steps of the operation; its difficulties must be experienced to be fully understood; but there are some points worth noticing; as, *e.g.*, the origin, primary and exciting, and other peculiarities. The exhibition of cancer wholly depends on preexisting diathesis, this being always hereditary. I have rarely met with a case which could not be traced back on either the maternal or paternal side. Some few, certainly, have denied its existence through transmission. But in such cases I have found that the death of the parents had taken place when the patients interrogated were too young to have any recollection of the circumstance, or the cause of death was involved in obscurity and doubt. Mechanical injury, it may be observed, is almost invariably the *exciting* cause. Out of a very large number afflicted with this disease who have come under my notice, I do not know one to whom this remark does not apply. The age of this patient corresponds with that generally noticed as the most favourable for the exhibition of cancer, and the preference which it shews to the *right* side, as observed by Walshe and others, is confirmed in my experience. The presence of the arcus senilis has been noticed by me repeatedly in this

disease, as being very distinctly marked in very many of my patients. Whether future observation will warrant its being ranked as a diagnostic in cancer, remains to be seen.

CHOLERA, AND THE WATER SUPPLY IN THE SOUTH DISTRICTS OF LONDON.

By John Snow, M.D.

A passage, respecting the effect of water supply on cholera, in the recent document published by the General Board of Health, having been brought prominently before the British Medical Association, in a leading article of the Journal of October 10th, I think it highly desirable to point out that this passage does not by any means convey the whole truth, as regards the effect of the water supply on the epidemic of 1854. Instead of the cholera mortality in the houses supplied by the bad water being 3½ times as great as in the houses supplied by the better water (the statement of the Board of Health), it was in reality six times as great.

It may perhaps be asked, of what consequence are the exact proportions, so long as the principle is admitted? If the report were merely intended to produce in public authorities and private individuals a certain amount of scrupulosity with regard to the supply of drinking water, the exact numbers would perhaps not matter much; but, when the facts are laid before medical men, it is of the utmost importance that they should be correctly stated. Science cannot be advanced by incorrect quantities and numbers; and, in the present instance, the real facts have an important bearing on the question as to the nature of the material in the impure water which induces cholera, and the manner in which the same morbid material causes the disease in other cases, without the aid of water as a medium.

My attention had been closely applied to the particulars of the water supply of London for upwards of five years before the epidemic of cholera of 1854; and I had, from various sources, became acquainted with a number of circumstances which made it possible for a very conclusive personal inquiry to be made, in respect to that kind of influence of water supply on cholera which I had published in 1849. These circumstances were necessarily known to a number of workmen and several official persons, but probably not in their collective form to any other person interested in the mode of propagation of cholera, except myself. The particular circumstances of the water supply, and its adaptation to the kind of personal inquiry which I conceived and undertook, were first published by me in the *Medical Times and Gazette* of September 2nd, 1854, p. 247, and were alluded to in a leading article in the Association Medical Journal for October 27th of the same year.

I called myself at every house from which a cholera death had been registered, in the first seven weeks of the epidemic of 1854, in all the districts in which the supply of the two Water Companies in question was intermixed; and, if the illness had not commenced in the house in which the death took place, I then sought the real place of attack, and in either case I ascertained the water supply of the house. I did not rest satisfied with a mere verbal reply; but obtained, in all cases, such corroborative evidence as could leave no doubt on the point, and I have the notes of my results. As a proof of their general correctness, I may mention that Mr. Greenwood, the very intelligent registrar of Christchurch, Southwark, made an inquiry on the same point for the same seven weeks, in his district, and, on our comparing notes, our results were exactly the same in every instance, although our respective inquiries had been conducted in a different manner.

The result of my inquiry was that, in the first four weeks of the epidemic, the cholera was between thirteen and fourteen times as fatal in the population having the impure water supply of the Southwark and Vauxhall Water Company, as in the population having the improved supply of the Lambeth Company, taking into account the number of the population supplied respectively by each company. In the next three weeks of the epidemic, the mortality was nearly eight times as great in the one population as in the other.

Dr. Farr having been much struck with the results which I communicated to him of my inquiries, the Registrar-General, at the end of these seven weeks, directed the district registrars in the south districts of London, to furnish the water supply of each house in which a fatal attack of cholera might occur during the rest of the epidemic.

During this part of the epidemic, comprising ten weeks, and including its most severe period, the mortality was still more than five times as great in the population supplied by the first of the above mentioned companies as in that supplied by the other; so that the result of that part of the inquiry conducted through the office of the Registrar-General, afforded a strong corroboration of the correctness of the previous part. I have, moreover, shown in an article in the *Journal of Public Health* for October 1856, that the whole of the inquiry agrees with the relative mortality of the different districts and sub-districts supplied in varying proportions by the two Water Companies, both at different periods of the epidemic, and for the whole epidemic, in such a manner as could not happen unless the results of the inquiry were substantially correct. I have already stated that the relative mortality of the two populations differently supplied with water was six to one, when the whole epidemic is considered.

The results of the above inquiry having been canvassed by the Scientific Committee of the General Board of Health, a further inquiry was instituted, and was carried out within the eighteen months following the epidemic, and furnished the numbers quoted in the Journal of the Association. This further or supplemental inquiry was conducted as follows. Lists of the houses supplied by each Water Company were obtained from the two companies, and these lists were compared with the lists of deaths from cholera at the General Register Office. There are several reasons, however, why an inquiry thus conducted could only supply an approximation to the truth, and could bear no comparison, in point of accuracy, with a personal inquiry made on the spot, at the time of the epidemic.

1. The inquiry of the Board of Health is into the water supply of the house where the death took place, and not, like the previous inquiry, into that in which the fatal attack occurred; but many persons attacked with cholera in houses supplied by the Southwark and Vauxhall Company were removed to workhouses supplied by the Lambeth Company, whilst hardly any persons were attacked in houses supplied by the latter company, and then removed to a workhouse having the opposite supply, as I know from my personal inquiries in the first seven weeks of the epidemic.

2. Throughout the greater part of Lambeth, Newington, and the Borough, the houses were either without numbers, or numbered very irregularly; and the numbers were liable to frequent change, especially where new houses are constantly being added: therefore, numerous errors were liable to be made in comparing the lists. There were often two or three houses of the same number in the same street; thus it happened that, in the first fatal case I inquired about, the death did not occur at the first No. 6 I called at, but at the No. 6 down the other side of the way; and the water supplies of the two houses were different. Now this is particularly important; for, as the deaths were six times as numerous in the houses supplied with impure water as in those with the better supply, the result would be that, out of every six mistakes, five would transfer a death from the former houses to the latter, and only one would transfer a death from the latter houses to the former.

3. It so happened that the lists supplied by the Lambeth Water Company (that with the purer water) are so arranged and explained that every place might be made out, unless when the above mentioned difficulty about numbers occurs; but the lists supplied by the Southwark and Vauxhall Company are made out in such a manner as to be of only very partial service. They have a kind of alphabetical arrangement, but it is of no use. For instance, to put down such names as Albert Terrace and Providence Place, with no other information than that they are somewhere in a district which extends over ten or fifteen square miles, is to give very little information. Consequently, whilst all the deaths occurring in houses supplied by the Lambeth Company could be identified in the list, and others attributed to these houses from the sources of error above mentioned, it would necessarily happen that a great number of deaths occurring in houses supplied by the Southwark and Vauxhall Company could not be identified; and, in the Report of the Board of Health on Cholera, as affected by Impure Water, as many as 1,436 deaths, in the epidemic of 1853-54, are returned as occurring in houses supplied from unknown sources, although there were comparatively few houses which were not supplied by one company or the other.

The deaths in the epidemic of 1853 are included, with those of 1854, in the Report by the Board of Health which is quoted in the Journal of the Association; but this circumstance could not much affect the result, and certainly not in the direction in which it deviates from the original inquiry; for in 1853 there

was but a small number of deaths, especially in the districts to which the water supply of the Lambeth Company extends.

For the various reasons stated above, we may conclude that the supplemental inquiry of the General Board of Health into the influence of water supply on cholera is of some value, and corroborates the original investigation, but ought by no means to be quoted as an exact exposition of facts, or be allowed to set aside the previous inquiry.

CASE OF INTRAUTERINE FRACTURE.

By Francis Davies, Esq., Pershore.

The following case is of no practical value. But as it corroborates some of Dr. Barker's cases, possibly it may be thought interesting.

I was requested to see a woman who had been confined two days. She had been walking down a footpath through a wood of my father's, some six weeks previous to her delivery, when, in crossing a stile, her foot slipped. She fell heavily on her abdomen on the stile. She felt as if a penknife was pricking her for several days. She got quite well, and was confined at her full period.

On examination of the child, I found that the thigh had suffered a compound fracture, and that the bones overlapped nearly an inch. The child has grown up to be a man; but his fractured leg is only now about a foot in length. He is now a schoolmaster in the parish of Llanpumpsaint near Carmarthen.

INTRAUTERINE FRACTURES.

By Gustavus C. P. Murray, Esq., M.R.C.S.E.

This subject of medical science having been recently and ably brought before the notice of those who are especially engaged in obstetric practice, by Dr. Barker, of Bedford, I am induced to narrate the following case, which occurred last year during my attendance at the Vienna General Lying-in Hospital. I must state that my notes were taken for private use, and not for publication; and hence their brevity and imperfectness.

Case. Francisca Raplan, a native of Telluris, aged 26, of a sallow and unhealthy complexion, and in a great state of debility, was delivered of her first child at the end of the seventh month of gestation. The fœtus at birth presented the following appearances:—The left side seemed soft, and as if consisting of nothing but loose and unhealthy fat; whereas the right side exhibited a very remarkable contrast in its rigidity. Upon further and closer examination, the left humerus was found to be broken at its centre, the ulnar and radius of the same arm being perfect; but the fingers, which were longer than usual, and also in proportion to the rest of the body, were greatly curved backwards, especially at their extremities. The right arm was rigid and shrivelled, with the bones unbroken, and the thumb and fingers closely drawn together. The left femur was fractured in its upper third, the tibia and fibula being perfect. The right leg was as rigid and firm as the right arm, and the bones were also entire, but the foot was, to a very great extent, curved inwards, forming a perfect arc. The scrotum and penis were œdematous, and of a slightly greenish yellow colour. The length of the fœtus was from twelve and a half to thirteen inches, and the circumference of its head, measured above the ears, was eleven inches. It survived a few days, and died on the morning I left Vienna. I was therefore, unfortunately, unable to attend the *post mortem* examination.

Through the kind assistance of a German friend, I learnt from the mother that she had met with no accident or unusual circumstance during her pregnancy; but she admitted that about the fourth week after conception a syphylitic eruption appeared over her whole body, and for this she consulted a homœopath, who administered minute doses of corrosive sublimate. After pursuing this treatment for two months the eruption entirely ceased, and she remained perfectly well up to a week before her confinement, when condylomata appeared on the labia, the inner part of the thighs, and around the anus.

Remarks. With the above positive evidence of syphilis existing at an early period of gestation, and presuming, from the character and habits of the mother, that she had been no doubt infected with the syphilitic poison long before conception, we have, I think, some good grounds for supposing that the fœtus became affected through the diseased condition of its parent. The fœtus had evidently not arrived at maturity; and as it was not dead, and the mother had received no external or internal injury, either of which might have brought on labour, we are left to seek for some reason why the fœtus should have been born before its time, and when born why we should find one half of its body in a state of rigidity and atrophy, whilst the other half was pulpy, and contained two fractures.

I hope, in conclusion, that the history of this case may throw some light on the possibility of certain diseases, such as syphilis, when attacking the mother, being transmitted to the offspring, and causing either the fracture of its bones, or the arrest of its development.

Green Street, Grosvenor Square, October 1857.

Introductory Lectures.

ST. GEORGE'S HOSPITAL.

Dr. Fuller began his address by recalling to the senior part of his audience the difficulties and temptations they had had to encounter at the outset of their professional career, and made this a ground for addressing the remainder of his remarks to those who are now about to commence their studies in London. He first pointed out the nature of their adopted calling, and the motives with which it ought to be pursued. "If," he said, "it be true that a profession, which has for its object the saving of human life and the prevention of human suffering; which calls forth the noblest qualities of the mind, enlarges its sympathies, and tends to clear it of prejudice or error; which brings us in direct and intimate relation with our suffering fellow-creatures, and by giving us an insight into human nature under every form and every aspect, enables us to learn wisdom from the dearly bought experience of others,—if such a profession be worthy of your desire, you may be truly thankful for the selection you have made. A life of honourable usefulness lies before you, such as does not fall to the lot of every one. The profession of medicine, if worthily pursued, is a noble and beneficent vocation, softening and humanising those who follow it, leading them to regard with leniency the weaknesses of their fellow-creatures, and prompting them to spare no effort to relieve their mental anguish or assuage their bodily suffering." He urged them to take a high view of their profession, and to follow it steadily and consistently, in the hope that, whilst it may one day yield them an honourable subsistence, it may also enable them to cultivate those qualities which serve to distinguish a Christian gentleman. He then proceeded to offer them advice respecting the choice of friends and companions, and warned them not only against the idle and the dissolute, but against the good natured, well meaning, but thoughtless, whose inexperience leads them to imagine that there can be no harm in a little temporary self-indulgence, a little time devoted to the so called pleasures of a London life. He urged them to begin as they intended to go on, to be regular and constant in attendance at lectures, diligent in the dissecting-room, earnest in their private studies, zealous in the pursuit of that practical knowledge which is only to be acquired in the wards of the hospital. "The study you have embraced," he said, "is one to engross your whole attention, even if it had no relation to your future career through life. But forming, as it does, the groundwork of that profession which you have deliberately chosen, you are bound to devote your whole energies to its prosecution. You are bound to do so for the sake of your own reputation and future happiness, for the sake of those friends who have given you your education, and who are still assisting you, and for the sake of those poor suffering fellow-creatures who will one day look to you for relief; above all, you are bound to do so as the servants of an all-wise Providence, who has been pleased to enrol you among the number of those whom He employs as the channels of His mercy and the ministers of His earthly blessings, and who one day will require at your hands an account of the talents committed to your charge." He then proceeded to point out the necessity for learning to regulate the feelings and behaviour, to discipline the mind, and to follow strictly in the path of moral rectitude. "You must learn," he said, "to cultivate habits of order, method, and punctuality, so as to be able to economise your time; you must acquire the habit of directing your whole attention to the subject before you, so as to analyse

and reason on it correctly; you must learn to be exact in observation, and scrupulously accurate in your record of facts, to discriminate between the important and the unimportant, and so to arrange and classify your knowledge as to have it always available in practice. But, beyond all this, if you would succeed in your career, and occupy an honourable position in the world, you must learn to cherish self-respect and honesty of purpose—feelings inconsistent with mean or dishonourable actions; you must evince integrity of conduct, generosity of character, and kindliness of feeling towards your professional brethren; you must acquire a habit of self-restraint which shall enable you to bear with the waywardness of your patients, and a gentleness of manner and cheerfulness of disposition which shall render you a welcome visitor to them; you must learn to sympathise with them in their afflictions, to counsel them in their distress, and in every way so to regulate your feelings as to make yourselves their friends, as well as their advisers." "There is no walk of life," he continued, "in which persevering industry and good moral conduct meet with a surer or more lasting reward, or in which a life of idleness and misconduct more certainly leads to misery and ruin."

Dr. Fuller discussed the difficulties they would have to encounter, and assured them that they would meet with none which may not be readily overcome. "Believe me," he said, "the path which you are about to tread is not beset by any obstacles which may not be overcome by steady industry and application. It has its own, its special difficulties, but so has every walk through life; and he who would be useful, happy, and contented, must meet them in a proper spirit, and make the exertion which is necessary to overcome them." After referring to the multiplicity of new and isolated facts which will be brought before them in their different lectures, and to the difficulty they will experience in arranging and classifying them, Dr. Fuller urged them to take every opportunity of verifying these facts for themselves, by observations in the dissecting-rooms and in the wards of the hospitals. "The most valuable knowledge we possess," he said, "is that which we have acquired for ourselves by long continued observation and experience. It cannot, to any great extent, be communicated to others either orally or by writing; and therefore the utmost that can be said of books and lectures is, that they are faithful outlines, simplified and adapted for your instruction, and intended to be filled up by your personal observation. Go, then, to the source whence you may obtain the knowledge necessary to enable you to fill them up. Go to the bedside with a notebook in your hand; preserve a record of the cases which come before you; illustrate these, if you are able, by sketches and drawings; and in the evening arrange them methodically, study their details, compare them with one another, and discuss them with your fellow-students. Whilst so doing, you will find that many things occur to you which had previously escaped your notice; you will be led to view symptoms in a different light, or to trace some unobserved connexion between them; and, if you steadily follow out this system of note-taking, you will be surprised, when you leave this scene of great labours, to find how large a store of facts you will have accumulated,—facts, moreover, of a practical nature, which will serve as references in after years, and prove most valuable guides to you through life."

Dr. Fuller then proceeded to offer a few suggestions relative to their conduct and personal demeanour, and begged them to let it be quiet, thoughtful, and becoming in the dissecting-room; kind and considerate in the wards of the hospital. He advised them to select some rational and elevating pursuit as a recreation in their leisure hours; and warned them that, if they fail to do so, they will not only lose much valuable time, but fall into idle, careless habits, and surely expose themselves to the inroads of vice.

Dr. Fuller concluded by an appeal to a crowded audience, who repeatedly expressed their gratification, urging them to follow the examples of the Great and Good. "Let me beg of you," he said, "to be zealous in your studies; tread in the footsteps of those great men whose names adorn the bead-roll of our profession, and emulate their virtues, their industry, and attainments. If you cannot rival their glorious achievements, at least let it be obvious that you are doing your very best; that you are conscious of your privileges and mindful of your responsibilities. There is much here around you to cheer you on. The very ground you tread is hallowed by the memory of men who have earned a glorious, undying reputation. It was here, at St. George's Hospital, that Jenner studied; it was here that Cheselden operated for stone; here, too, the indefatigable Baillie worked, and Hunter won his way to fame. Nor are these the only men whose names deserve to be chronicled for your encouragement. Heberden, Young, and Wollaston, Pemberton, Hope, Chambers, and Mansfield Clarke. These, and a host of others who now are numbered with the illustrious dead, passed their early days within these walls, and many of them were medical officers of the Hospital. Even now there remains among us one who has earned a deservedly world-wide reputation, a man to whom we are largely indebted, and to whom we would all do honour. Yes, gentlemen, with Brodie for a living exemplar, and with the memory of those great and good men who have preceded him, to stimulate you in the pursuit of knowledge, you have no excuse for apathy or indolence. Go forward, then, manfully in the path which they have trodden; follow their footsteps honestly, earnestly, hopefully; strive to the utmost to become skilful practitioners, and to do justice to your patients, whether rich or poor; but, above all, be true to yourselves, and let it be your chief endeavour to deserve the good opinion of mankind as men of feeling, integrity, and honour. So, towards the close of your earthly career, you will be able to look back with honest pride upon the course you have been permitted to run, and will feel gratified by the reflection that, as far as in you lay, you have been useful in your generation, and have done your duty to God and man."

WESTMINSTER HOSPITAL.

The Introductory Lecture was delivered by Dr. Radcliffe. "When," says Archbishop Whately, "complaints are made, often not altogether without reason, of the prevailing ignorance of facts on such and such subjects, it will often be found that the parties censured, though possessing less knowledge than is desirable, yet possess more than they know what to do with. Their deficiency in arranging and applying their knowledge, in combining facts, and correctly deducing and rightly employing general principles, will be, perhaps, greater than their ignorance of facts. Now to attempt remedying this defect by imparting to them additional knowledge, to confer the advantage of wider experience on those who have not skill in profiting by experience—is to attempt enlarging the prospect of a short-sighted man by bringing him to the top of a hill, since he could not on the plains see distinctly the objects before him; the wider horizon from the hill-top is utterly lost upon him."

Up to the time of Bacon the prevailing fault among philosophers was, hasty, careless, and scanty observation, and the want of copious and patient experiment. On supposed facts not carefully ascertained, and often on baseless conjecture, men proceeded to reason, often very closely and ingeniously, forgetting that no architectural skill will give firmness to a building if the foundation be insecure. In other words, they reasoned on fancies instead of facts. Since the days of Bacon there has been an ever increasing tendency to disparage the reasoning process, and to substitute "the mere accumulated knowledge of a multitude of facts," and trust to what is often called *experience*—meaning by that an extensive, but crude and undigested observation. Dr. Radcliffe would appeal to the consciousness of all around him, and ask whether their present difficulties are not rather in arranging and supplying their knowledge, in combining facts and correctly deducing and rightly employing general principles, than in any ignorance of facts. Is not the multitude of facts crowded into the different subjects with which the students of medicine have specially to do, more than they know what to do with? and, in mastering these facts (if any one may hope to master them), is there not much danger of being bewildered, or, at best, of leaving little or no time for the deduction and right employment of general principles?

What, then, is to be done? Is it possible to deduce any general principle—any general principle which will be of practical use from this multitude of facts? In the opinion of the lecturer, it is. At any rate, there need be no difficulty in pointing out the path which must be pursued in searching after such a principle.

After these introductory remarks, Dr. Radcliffe proceeded to glance at the arguments which show that there is a connexion between heat, light, electricity, magnetism, chemical power, and some kinds of motion, which is only to be understood upon the supposition that these phenomena are signs of *one and the same action*, and not distinct and independent agents. In the next place, he dwelt at some length on the connexion existing between vital and physical phenomena, and cited many

arguments which serve to show that this connexion is not to be understood except upon the assumption that there is some ground, some fundamental principle or law, to which all phenomena, vital and physical, are alike obedient.

The lecturer then proceeded to deduce certain practical consequences from this doctrine of unity of principle or law. If there be such a principle, it is no question of theory, it is one of practice; and this conclusion must become self-evident, just in proportion to the degree in which medicine is raised to the rank of the exact sciences. If there be this unity of principle in law, it is evident that all natural phenomena must be interpreted by it, if they are to be interpreted at all. As well might we attempt to understand the falling of a stone towards the earth, or of the earth towards the sun, without the law of gravitation, as attempt to unravel any mystery of life without this principle. Turning to the subject of disease, and adducing cholera and consumption as special illustrations, he argued that disease is a *natural* consequence of the violation of law or principle, and not something *unnatural*—something *in order*, and not something *out of order*—even something as purely physiological, when properly understood, as health itself.

Dr. Radcliffe maintained that the grandest generalisation of all—that which explains the mystery of life—will not be established simply and solely by an appeal to nature. If we appeal to nature, and ask what is life and conscience, and will and intelligence, with its wondrous powers of memory and anticipation, what is the answer? The oracle is as dumb as that of ancient Delphi; for it boots nothing to be told to ransack the convolutions of the brain; and it avails as little to pore over the pages of the metaphysician; and yet the physician must set himself to learn all he can respecting them, or he will not have much chance of relieving the most important maladies to which the human frame is subject.

But these faculties are only unintelligible, if information respecting them be sought solely in the oracle of nature; but they are not unintelligible if information be sought first at a higher oracle—that of revelation. What is that nature in which these high faculties of life, and conscience, and will, and intelligence, are lodged? The oracle of nature is dumb; the higher oracle answers, that man was created in the image of God himself. There is no obscurity, and the answer cannot be misunderstood, except from sheer wilfulness or inattention. And is it then a wonder that man, whose nature is thus godlike, should be endowed with life, and conscience, and will, and intelligence? Assuredly not. The wonder is, not that man should live, but that he should be shorn of the life of Him who is from everlasting to everlasting. The wonder is, not that man should be endowed with a conscience, but that that record which tells of the holiness of man's august original should be so steeped in evil. The wonder is, not that man should have a will, but that the image of the Omnipotent God should be so impotent and helpless. The wonder is, not that man should know a little, and remember a little, and anticipate a little, but that he should retain so little of the intelligence of Him to whom past, present, and future, are at once open. The wonder is, that man is so "lapsed in time and passion": but why talk of wonder? for if we listen to the same oracle, which tells us that man was created in the image of God, we shall soon learn that man has fallen from his high estate.

Dr. Radcliffe believed that it is in this way only that we can hope to comprehend the higher mysteries of the life of man; and that without this key it will be impossible to comprehend any vital phenomena whatever. Man is not altogether severed from the lower forms of life. There is a common type, a common law, which binds him to them in an indissoluble alliance; and hence, it may be expected that the image of man will be reflected upon them, as the divine image is reflected upon him. And, if so, then it is no wonder that there should be manifold evidences of life and intelligence around and beneath man, and that these evidences should be perfect in their degree, because the lower forms of creation are not revealed to us as having partaken in the fall of man, or, at any rate, they are not revealed to us as having fallen in the same manner; and, if the lower forms of creation have not fallen as man has fallen, it is to be expected that the several vital phenomena which belong to these forms should be perfectly adapted to the condition in which these forms are placed, and that any intellectual phenomena should partake of the character of instinctive acts. Indeed, every vital phenomenon, high or low, must take place with perfect regularity under the same circumstances, because there is no perverted will to mask the manifestations of that perfect law, of which the vital phenomena are the signs.

The lecturer believed not only that there is no discrepancy between the teachings of Holy Writ and the teachings of nature; but also that the mystery of nature will remain a mystery until philosophers will consent to listen to the teachings of Holy Writ. It is not enough to seek after a common law in the way in which it may be sought after in nature alone; but it is necessary, even as a scientific question, to pursue the subject far beyond; and to do this with a view to know the lawgiver as well as to comprehend the law. "A little philosophy," says Bacon, "inclineth man's mind to atheism; but depth in philosophy bringeth man's mind about to religion." It is not possible, indeed, to ignore religion in scientific inquiry; and to attempt to do so is to forego the possibility of attaining to the highest generalisation—a generalisation which gathers into one principle all phenomena, vital and physical, and which connects that principle with a superintending Deity, in whom we live, and move, and have our being.

Reviews and Notices.

An Expository Lexicon of the Terms, ancient and modern, in Medical and General Science; including a complete Medical and Medico-Legal Vocabulary, and presenting the correct Pronunciation, Derivation, Definition, and Application of the Names, Analogues, Synonymes, and Phrases (in English, Latin, Greek, French, and German) connected with Medicine. By R. G. Mayne, M.D. Part vi. London: John Churchill, New Burlington Street. 1857.

A sixth part of Dr. Mayne's useful Lexicon lies before us. It has now reached to part of the way through the letter P; and we trust to see another portion of the work before long. As to its execution, we can only speak of it in the same terms of praise as on previous occasions.

Report of the Trial of Madeleine Smith before the High Court of Justiciary at Edinburgh, June 30th to July 9th, 1857, for the alleged poisoning of Pierre Emile l'Angelier. By Alexander Forbes Irvine, Advocate, pp. 307. Edinburgh: T. and T. Clarke, 1857.

This is a full report of the proceedings at the recent celebrated trial in Edinburgh. Every care, we are assured, has been taken to produce accuracy; and the Lord Justice-Clerk, the Lord Advocate, and the Dean of Faculty, have each revised their charges to the jury. To medical jurists, therefore, who wish for a correct account of this extraordinary case, the present volume will be valuable.

British Medical Journal.

SATURDAY, OCTOBER 17th, 1857.

THE NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

The present week will be long remarkable in the annals of our history, for the inauguration of a society, having for its object the investigation of problems affecting at once our individual welfare and our national prosperity. The Association for the Promotion of Social Science was inaugurated at Birmingham on Monday last, by a speech from the President, Lord Brougham. Of his Lordship's address, we give some extracts in another page, selecting principally those portions of it which have a bearing on the practical utility of combined action: but recognising at the same time the great importance to us all, as members of the state, of all the subjects which were ably

touched upon. After the delivery of the President's speech, an address on his special subject was given by the president of each of the sections into which the Association is divided: viz., in the section of Jurisprudence and the Amendment of the Law, by Lord John Russell; in the section of Education, by Sir John Pakington; in the section of Punishment and Reformation, by Mr. M. D. Hill, Recorder of Birmingham; in the section of Public Health, by Lord Stanley; and in that of Social Economy, by Sir B. Brodie. Abstracts of the addresses of Lord Stanley and Sir B. Brodie will be found in a following page.

En passant, in these last two addresses we have a practical abnegation of the old maxim, *Ne sutor ultrà crepidam*. The statesman takes in hand the problem of preservation of health, as if invading the province of the medical man; while the veteran surgeon gives the impetus to discussions on a branch of knowledge regarded more as the property of the state philosopher. But this is not otherwise than as it should be. The health of the people, in common with everything that concerns the good of the nation, falls rightly under the observation of the statesman: and the consideration how the social well-being of the people may be best promoted, is one of the most legitimate objects of the practical energies of the true medical scholar.

This great and important association has then been inaugurated. Let us reflect how it has begun. It is not a mere mushroom growth, a hasty calling together of men unprovided with facts on which to reason, and unprepared with ideas to which to give utterance. For years and years past, facts have been accumulating to show the necessity of social progress, and to point out—sometimes, indeed, rather vaguely—the direction in which progress should be made. For years and years past the subjects of the various sections have been reflected on, talked on, written on, by men of theory and men of practice; by men of one idea, and by men of comprehensive mind; by the votaries of sudden and radical change, and by the advocates of gradual reform. In regard to many of the special topics, the existing facts of the case, the necessity for action, and even the general direction which that action should take, have long enough been matters of common agreement; but when men have come to consider the details of action, their unanimity has ceased, many a one, in his fondness for his own scheme, has become an obstructive in that path which he would professedly have his fellow men to follow.

This is somewhat as if, for example, it were possible that no road existed between London and Birmingham. The necessity for such an aid to travelling would be plain to all: *a road* must be formed. But shall it be a highway or a railway? shall the means of conveyance be a "fast coach" or a railway train? Each of these plans has its supporters; and while the claims of each are being supported with all the energy and eloquence which man can call to his aid, no road is made, and unfortunate travellers must get on as they best can, or not at all.

This last illustration is somewhat extreme, and, it may be, a little ridiculous: we think, however, that it conveys our meaning. But while we write, an example occurs to us in a matter of real occurrence. The Metropolitan Board of Works and the Commissioner of Works and Public Buildings agree that London ought to be properly drained, and that the sewerage matter ought to be carried clean out of the city. So far, so good; and these points have been agreed on, we may say, for years; but London sewerage still pollutes the river as it flows through the metropolis. And why is this? Very much because favourite schemes are pertinaciously maintained by the one party, and rejected by the other. And while plans and resolutions are being bandied about, King Cholera may again and again invade our land, and find at each visit an active ally in our dirty river.

It is to bring together men of different views, to compare, to contrast, to combine, and to neutralise various opinions, so as to elicit that which is most practicable, that is a great object of the Social Science Association. This was well insisted on by the noble president:—

"There is a peculiar expediency," he said, "it may rather be said necessity—for such a common or united action where a great variety of opinion is likely to exist upon many matters, possibly no universal concurrence upon all the particulars of any one. Assuming every person to be inspired with the pure and single desire of performing his duty towards the community, it is still unavoidable that men should view the same subject in different lights, and that the absence of such standards from demonstration or experiment as the reasoners on other sciences can appeal to should create doubts and introduce diversities of opinion. In some cases these differences may yield to full discussion, but in not a few instances they will remain, and here is precisely the inestimable advantage of such an union as ours. That discussion and explanation may often remove the grounds of dissent is undeniable. We may affirm that there is less diversity of opinion than might have been supposed even upon general subjects; and that ignorance or misinformation, or inattentive and therefore inaccurate observation, or careless reflection and hasty declaration, is the cause of most of those differences. However that may, we summon those who honestly differ in opinions, because they regard the same subject from different points of view, to look at both sides; when possibly they may be found to agree, and because it is of incalculable importance that those points on which they are agreed should be separated from the rest, and the measures approved regarding which no material difference exists."

It is to be noticed, that Lord Brougham does not sanguinely expect that the discussions at Birmingham will bring about absolute unanimity on all disputed points; nor does any reasonable man, we trust, entertain so preposterous an idea. But there may be some, who will hold the Association as a failure, because its results may not be at once so magnificent as to strike even the mentally short-sighted in the world with admiration. To such we would merely say, that in all probability it will not be possible for us of the present day to judge of the effects produced by the striking together of intellects, which has been brought about under the auspices of Lord Brougham. It is not in the lifetime of any one of the members of the Association, from the veteran president to the youngest of them all, that the positive or the negative character of its workings will be fully comprehended. What we rather expect from it is, that from the collection and comparison of facts, and the collision and combination of opinions, some results of magnitude may indeed shortly follow: but rather, that the members will gather up and carry home with them sound notions, to which a vigorous practical development may be given by patient fostering for even a series of years. In this way, the historian of forty or fifty years hence, looking at the social improvements with which the British nation may have been blessed, and tracing them to their sources, will no doubt find the germs of

not a few in the discussions at the meetings of the Association for the Promotion of Social Science.

Before we conclude our remarks, we must not omit to record our admiration of the philosophical sentiments uttered by the President of the Section of Public Health. Recognising the fact that it is not merely in the deaths, but in the impaired constitution of the people, that the evils of sanitary neglect are shown, he expresses a belief to which all sanitary reformers will give their adhesion:—

"I believe that, whatever exceptions may be found in individual instances, when you come to deal with men in the mass, physical and moral decay necessarily go together: and it would be small satisfaction to know that we had through a series of ages successfully resisted every external agency, if we learnt too late that that vigour and energy for which ours stands confessedly preeminent among the races of the world were being undermined by a secret but irresistible agency, the offspring of our own neglect, against which science and humanity had warned us in vain."

Sir Benjamin Brodie, too, in his address in the section of Social Economy, touched on a subject which has for a long time engaged the attention of the medical profession: and we trust that some practicable suggestions may emanate from the Association as to the management of our so-called public charities, the abuses attendant on which are matter of notoriety.

In the section of Sanitary Science, we have noticed with satisfaction that several of the members of our Association have been taking an active part. Mr. Michael of Swansea has read a paper on "The Influence of Habitation on the Community;" and Mr. Rumsey of Cheltenham one on "Density of Population and Localisation of Dwellings." But we must leave an account of these and of the further proceedings of the Association to a subsequent number.

THE WEEK.

Mr. Griffin's letter in this day's Journal illustrates another of the annoyances to which the Poor-law medical officer is liable; or rather, we should say, it illustrates *two* grievances. First, his average salary per case is one shilling and threepence three farthings, while that of one of his colleagues is fourteen shillings and seven pence—rather more than eleven times the amount of Mr. Griffin's. Secondly, for the said average of fifteen pence three farthings he is expected to provide and pay for the necessary professional aid in performing amputations and other "capital" operations. On these points he remonstrates once more with the Poor-law Board; and in the course of his letter he alludes to the circumstance that "while his colleagues have not performed any operations of importance during the last two years and a half (except in one instance tapping a woman), he has had to amputate a limb above the knee, remove part of a hand, a tumour of importance from a child's side, resect an elbow-joint, and operate for strangulated hernia." Surely the labourer in such cases is worthy of more than fifteen pence for his hire?

The London police are having their ingenuity employed in endeavouring to discover the victim and detect the perpetrators of a most remarkable murder. On the morning of yesterday (Friday) week, two young men, while in a boat on the Thames, found a carpet-bag resting on one of the abutments of Waterloo Bridge. It contained the remains of what appeared to be a middle aged man. They consisted of a number of bones, forming nearly a complete skeleton, but wanting the head, hands, and feet. The greatest portion of the flesh had been removed, but a considerable part of the breast and the portion of the side under the armpit still remained attached to the ribs. The whole had evidently been soaking in brine for several days, and a portion was in perfect preservation; but some parts, where the salt had not taken effect, were somewhat decomposed. The bones had been divided with a very fine saw, which, however, had been used unskilfully, as by a person not accustomed to use such instruments. There was a deep gash in the breast, as if from a stab with a knife. The bag also contained a suit of clothes, of good quality. The clothes were pierced, both before and behind, in several places, as from stabs—seven being about the region of the heart. As yet, all efforts to discover who the victim was have failed. From the clothes being of foreign make, it is supposed that he was a stranger in this country.

Association Intelligence.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

LIST OF MEMBERS: NOTICE.

In accordance with Law 24, a list of members of the British Medical Association will shortly be published. Gentlemen whose designations or addresses are incorrectly given in the last list, or on the wrappers of their Journals, will oblige by at once forwarding the necessary corrections to the Editor of the Journal, 37, Great Queen Street, Lincoln's Inn Fields, London, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

The General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the Admission of Members, and the Payment of their Subscriptions.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.
2. Payment to the Secretary of the Branch to which the member belongs.
3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the British Medical Journal, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

Philip H. Williams, *General Secretary.*

Worcester, October 1857.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

An Ordinary Meeting of this Branch was held at the York House, Bath, on September 24th, at 7 P.M.; A. Prichard, Esq., President, in the Chair. There were also present: J. S. Bartrum, Esq. (Bath); W. H. Brace, Esq. (Bath); W. Bush, Esq. (Bath); W. J. Church, Esq. (Bath); E. Cockey, Esq. (Frome); J. Crang, Esq. (Timsbury); N. Crisp, Esq. (Bristol); W. Davies, M.D. (Bath); J. G. Davey, M.D. (Northwoods); C. Edwards, Esq. (Batheaston); F. Flower, Esq. (Chilcompton); E. L. Fox, M.D. (Bristol); Jas. Godfrey, Esq. (Bristol); W. Henderson, M.D. (Bristol); W. B. Herapath, M.D. (Bristol); R. C. Holland, Esq. (Bath); J. C. Jennings, Esq. (Malmsbury); G. King, Esq. (Bath); J. Lancaster, Esq. (Bristol); C. Leonard, Esq. (Bristol); F. Mason, Esq. (Bath); E. S. Mayor, Esq. (Bristol); J. Metford, Esq. (Bristol); G. Norman, Esq. (Bath); J. Parsons, Esq. (Beckington); G. Skinner, Esq. (Bath); J. K. Spender, Esq. (Bath); R. N. Stone, Esq. (Bath); S. H. Swayne, Esq. (Bristol); J. A. Symonds, M.D. (Bristol); G. Terry, Esq. (Mells); J. Tunstall, M.D. (Bath). Mr. White of Frome attended as a visitor.

The minutes of the last ordinary meeting were read and confirmed.

NEW MEMBERS.

E. L. Fox, M.D., and W. Henderson, M.D., of Bristol, were balloted for, and unanimously elected members of the Branch.

SUGAR AS AN ARTICLE OF DIET IN DIABETES.

BY W. BUDD, M.D.

[In the absence of Dr. Budd, the paper was read by Dr. Herapath. It will be published in the Journal.]

Dr. Symonds, after remarking on the highly interesting and valuable character of Dr. Budd's communication, said that the case, if it proved nothing else, proved the advantage of an entire change of diet. Whether the ingestion of sugar can be good as a chemical element, would have to be proved by a collection of several cases. It must not be forgotten that a like improvement has been observed in a vast number of cases in which a change had been made from a mixed diet to one that excluded saccharine and farinaceous articles. Dr. Symonds alluded to cases, in which all the characteristic symptoms and chemical evidences of diabetes returned when the patients had deviated from the strict rules of diet. He thought that M. Bernard had proved by experiments that diabetes consisted essentially in excess of the *glycogenic* function of the liver; that is, in its making sugar in excess, and at the expense of the albuminoid constituents of the blood. If the use of sugar in food should be found to restrain this morbid increase of function on the part of the liver, it would be a remedy. Dr. Symonds alluded to the advantage derived for a time from medicines, such as nitric acid, carbonate of ammonia, and particularly creasote and opium, tonics, cod-liver oil, etc.; and said that, as it has been found by M. Bernard and others, that the production of sugar in the blood was very much influenced by impressions made on distant organs, as the brain and even the lungs, and reflected on the liver, it was probable that our various remedial measures and plans of diet were successful or not in diabetes according as they improved the functions of the stomach, duodenum, and intestines, calmed the nervous system, and directly or indirectly amended the action of the liver. Perhaps it would be proved that the exclusion of saccharine food, in the established system of treatment of this disease, had done good by its influence on the digestive functions, rather than by its chemical restrictions; and, on the other hand, that, when a patient was getting worse under such a diet, and craving for something different, the change even to a saccharine aliment might, for a time at least, improve his condition, as in the case just detailed.

Dr. Davies said that the great object in the treatment of diabetes was to improve, by every means, the powers of digestion. The proof by Bernard of the formation of sugar in the liver from nitrogenous food takes from the received treatment its chief support, and renders it less incumbent to exclude the saccharine and amylaceous elements from the diabetic diet.

Dr. Herapath would call the attention of the meeting to the following points in Dr. Budd's case:—1. The patient was only 18 years of age, and an agricultural labourer. It was, therefore, one of those evanescent and more easily manageable cases, and not of that confirmed chronic character which are usually so troublesome to cure. 2. Although no cause had been assigned for the onset of the disease, the probability is that exposure to the inclemency of the weather was the exciting cause. 3. In reference to the treatment, although sugar, treacle, and honey, had been employed freely, yet these must be considered more as articles of dietary than as curative remedies. 4. Dr. Budd did not say that the sugar had wholly disappeared. The history of the case clearly showed a most striking improvement after the adoption of this dietary; and, at first sight, the results, which were so contrary to all experience, appeared startling. Every one accustomed to diabetic patients must have seen the ill effects resulting from indulgence in fruit or even starchy food, which, by the agency of the saliva and pancreatic fluids, are convertible into glucose. But glucose was not cane-sugar; and here was the grand distinguishing point in the case. Three varieties of sugar were given by Dr. Budd—sugar candy, treacle or molasses, and honey. The first two were cane-sugar, fermentible with very great difficulty, and only capable of undergoing fermentation after conversion into glucose by the assimilation of the elements of water. There was no evidence to prove that the stomach can convert cane-sugar into grape-sugar or glucose. The stomach, or the salivary or pancreatic fluid, do not possess any such converting action, so far as is known. Cane-sugar consists of $C^{12} H^9 O^9 + 2HO$; and glucose, of $C^{12} H^{14} O^{14}$; so that, to convert cane into grape sugar, three equivalents of water must be added to, or rather *combined with* the sugar. Now, to accomplish this, the chemist employs prolonged digestion in dilute sulphuric acid, and aids the conversion by heat. Generally, a solution of sugar in an acid of 3 per cent. requires about forty-six or forty-eight hours digestion, at a temperature of 130° or 150° Fahr. (Hydrochloric acid, or even prolonged digestion with alkalies, will do the same.) It is well known that starch, $C^{12} H^{10} O^{10}$, will, in the stomach, assimilate water, and become glucose, $C^{12} H^{14} O^{14}$. A parallel action appears to occur here; but still it is not identical, the starting points being different. Although the gastric juice, and the pancreatic and salivary fluids, are all acid, yet they are much weaker than 3 per cent.; and no one will presume to say that a temperature of more than 98° Fahr. can be attained in the stomach, or that this chemical action can be kept up during forty-eight hours; and this even exclusive of the acid being different from that requisite for the change. The probability is, therefore, that the cane-sugar is not converted into grape-sugar or glucose by the stomach during the process of digestion. But, even in Dr. Budd's case, there was ground lost when honey was given, the quantity of urine increasing, and the specific gravity rising. Honey is a variety of grape-sugar. All the crystals in honey are glucose; this, if taken as a dietary by diabetic patients, appears in the urine, as all know. Dr. Herapath could not, therefore, on these grounds, agree with Dr. Budd in permitting grape-sugar to be partaken of by diabetic patients, or consider it advisable that any large amount of starchy food should be given; but he was quite prepared to allow cane-sugar, or any of its varieties, as an addition to a full allowance of nitrogenous diet to such patients. It was erroneous to consider that the experiments of M. Bernard prove that the liver, and not the stomach, is the cause of diabetes. The probability is, that both causes are in action—the power which the stomach has of producing grape-sugar from starch, and also the power which the liver possesses of extracting sugar (inosite?) from decomposed or effete tissue; and, until we determine which organ is in fault in any particular case, or can treat both organs satisfactorily and simultaneously, we shall be unable to cure diabetes. The peculiarity with respect to this disease is the great want of animal heat which all diabetic patients possess; and Dr. Herapath had noticed that, if we can persuade our patients to take more exercise, the quantity of sugar decreases, and the animal heat improves. There is some grand connexion between respiration and diabetes. Improve respiration, and sugar disappears from the urine. Is it oxidised in the system or lungs, and converted into carbonic acid, thus contributing to increase the temperature of the body? Probably it is so. This led him to another point which he had noticed, viz., the occurrence of diabetes in patients who have been long exposed to the inhalation of an atmosphere containing sulphurous and hydrochloric acids in large proportion. Two cases had come under his notice in which the manager of a large alkali and vitriol works, and the secretary of a large gas works closely adjoining, both laboured under diabetes at the same time, and died from the disease, each having spent many hours every day for several years in such a vile atmosphere that no one with ordinary respiratory organs could pass through it without suffering from the irritation. Sulphurous acid interferes greatly with endosmosis; it also acts as an antiferment. Its presence in the atmosphere may

occasion, therefore, very serious consequences to the system. It would be well, therefore, for the society to inquire whether diabetes is one of the consequences of such action by prolonged exposure. The ordinary relation of the digestion of starch and sugar to the production of fat is well known; every agriculturist gives large proportions of these ingredients to his oxen, etc., in order to fatten them. The probability is, therefore, that starch is converted into fat, first passing through sugar in the system; and we learn from Liebig that, if we add albuminous matter to the dietary, we have all the ingredients necessary for producing choleic and cholic acids, urea, carbonic acid, water, and margarine or human fat. Thus, 4 albumen + 40 water + 32 oxygen + 20 equivalents sugar, would give us 4 choleic acid; 8 equivalents choleic acid, 12 urea + 36 atoms carbonic acid + 6 atoms margarine, and 12 water. (See Gregory's *Handbook of Chemistry*, 3rd edit., p. 491.) In diabetes, the conversion appears to stop at sugar; the necessary fat is not produced, all the fat-elements running off in the urine; and the sugar produced does not appear to be as capable of oxidation and conversion as in ordinary physiological secondary assimilation.

The President did not think that the meeting had given sufficient importance to the suggestion of Dr. Budd that diabetic patients should make sugar part of their diet. When a patient was voiding albuminous urine, we did not therefore restrain him from taking albuminous materials; nor, in the same way, should sugar be so rigidly excluded from the diet, as, discreetly administered, it would help to make up for the constant drain from the system of that which appears to be an essential element in our food and nutriment.

Treatment of Cholera by Purgatives. By J. G. Davey, M.D.

[This paper will be published in the Journal.]

Mr. Flower observed, that the treatment of cholera by calomel, which was almost universal at the first epidemic, was nearly the same as that advocated by Dr. Davey; the addition of colocynth and turpentine being the only difference. From a large experience, he could say that, in his district, calomel was the practitioner's sheet-anchor.

Mr. Edwards, in 1832, had a large district under his charge, where cholera made great ravages. Treatment had then no influence. In 1849, he tried purgatives, jalap, and scammony, with calomel, associated with sinapisms and stimulants. This plan he found so successful as to lead him to publish a pamphlet on the treatment of cholera by calomel. This treatment he had found most serviceable in all subsequent cases.

Mr. Norman commented on the varying character of the epidemics. The cholera of late years has been much modified, and much more manageable than was the first epidemic. There could be no question that cholera and diarrhœa were not identical. Diarrhœa might be present at the same time; but, in severe attacks, the patient was struck down by cholera often without any previous warning. Talk of purgatives or stimulants as a line of treatment! why, too often there was neither time nor opportunity for any treatment; the pulse never rose, and the collapse ended only in death. Since the first epidemic, the proportion of deaths had not been so great, nor the cases so virulent; but, in severe cases, it was idle to talk of treatment by purgatives, when the whole was over within twelve hours.

Dr. Tunstall had the care of a cholera district in 1832. At that time calomel, with or without opium, was the favourite treatment; but the patients got well, or died, do what one would; all treatment appeared to be equally unavailing; so that one could not lay down any line of treatment. Though calomel was preferred, phosphorus, assafœtida, and many other remedies were tried, and all were alike without effect. In 1849, purgatives were extensively tried—indeed, were generally adopted. The mortality of that epidemic was not so great, but a very large proportion of the cases attacked ended fatally.

Dr. Symonds observed, that there was a marked difference in the results of treatment in the sporadic and epidemic cases of cholera. Almost all the sporadic cases terminated favourably. He then gave the history of a member present (Mr. Mayor), who recently went to bed quite well, but was suddenly seized with choleraic symptoms of the most decided character. In his case, he had found the combination of camphor with aromatic confection of the greatest use in allaying the vomiting and purging.

Mr. Crisp remarked on the character of the various epidemics of this disease. In 1849, few cases lived over twelve hours of collapse; three or four hours was the more usual duration. In this state, few substances had any effect. Ammonia had been injected by the pump into the stomach, with the hope of stimulating the functions. The solution was so strong that he feared he should have injured the tissues of the stomach; but, on *post mortem* examination, the lining membrane was found quite free from injection or other evidence of its having felt the stimulus of the ammonia. The protracted cases had a larger proportion of recoveries; in severe ones, the restlessness was often uncontrollable; and it was impossible to adopt efficient remedial measures, their course was so rapid.

Dr. Davey, in reply, stated that he had not tried purgatives uncombined with calomel, having found the combination of such essential service. His experience of the disease had been very large and varied, having had the care of a district in the Borough during the epidemic of 1832; subsequently he had seen hundreds of cases in India, China, and Ceylon. In all climates, the principles of the treatment were the same, the chief indications being stimulants combined with purgatives; but every case must be treated on its own merits. Except during an epidemic, cases of genuine Asiatic cholera were rare in England; but everywhere and always the principles of treatment were the same. He believed that calomel, when useful, acted as a purgative, and helped to restore the bilious motions, the reappearance of which was a marked sign of the patient's improvement.

Case of Impassable Obstruction of the Bowels. By J. C. S. Jennings, Esq.

[This case will be published in the Journal.]

Dr. Davies advocated the treatment of such cases by the use of opium, to the exclusion of purgatives, and almost irrespective of the cause of the symptoms. If the sickness was great, nothing but pieces of ice, or ice-cold water, were to be swallowed, while the patient was supported by enemata of beef-tea. With few exceptions, the cause of the obstruction was not to be overcome by anything that excited the action of the bowels. Under this sedative treatment, the progress of the cases was more free from suffering, so that his rule was almost wholly to abstain from purgatives.

Mr. Bush, since he had the advantage of Dr. Billing's teaching, had always used opium freely in these cases. In colic, he gave doses from half a grain to two grains frequently, till the pain subsided. Brandy was taken, and warm applications were appled to the abdomen, till the spasms and other symptoms had passed off. The vomiting in colic was caused by the spasmodic action of the intestines inclosing a portion of flatus, the retention of which, with the disordered action of the bowels, reacted on the stomach. When these spasms have subsided, castor oil will probably act; but it was needful that the pain and spasm should have ceased before even gentle purgatives were given. If the pains arise from irritation caused by food, severe purgatives relight the irritation, and so renew the cause of the pain.

Observations on the Ready Method in Asphyxia. By J. C. S. Jennings, Esq.

Mr. Jennings drew the attention of the meeting to some points in the directions for the restoration of drowned persons, called "the ready method". He said that he had, long before the publication of Dr. Marshall Hall's pamphlet on *Asphyxia*, shown the injury done by the warm bath in cases of drowning, and the close resemblance the laying the patient on the side, and then alternating the position, bore to the old treatment of rolling the drowned person in a cask.

Dr. Edward Fox, in the winter of 1855-56, had made the experiments quoted by Dr. Hall in page 31 of his pamphlet on *Asphyxia*. They were only a few out of a large number, the result of which was similar. He was most firmly convinced of the efficacy as well as of the simplicity of the method, which conviction was strengthened by the numerous instances of success recorded in the medical journals during the present and the past year. Dr. Hall first spoke to Dr. Fox on the subject in November 1855, and experiments were repeatedly made till May 1856. After having proved the fact to their own satisfaction, that natural respiration might be produced, they (Drs. Hall and Fox) proceeded to determine the amount of air expired and inspired. In severe cases, they found it to amount to thirty cubic inches—far more than is necessary to support life. These results were obtained on *dead* bodies, often with the drawback of considerable *rigor mortis*. Much more might the plan be expected to be efficacious when tried on the living subject, in whom animation has been temporarily suspended. As regarded the priority of claim to the discovery of the ill effect of the warm bath, Dr. Fox spoke from knowledge when he said that Dr. Hall's attention was turned to it whilst at Boulogne, in the summer of 1855. That he was unaware of the

views of Mr. Jennings, Dr. Fox was assured with the utmost certainty; his own views being based on the experiments of Edwards and Brown-Séquard, and also on some of his own. Dr. Hall did not claim any merit to himself as the discoverer of the ill effects of the warm bath.

Reports of Societies.

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

The meetings of the National Association for the Promotion of Social Science commenced at Birmingham on Monday last. We shall give an abstract of the proceedings as far as they may be of interest to the medical profession.

First Day.—Monday, October 12th.

The Association was inaugurated at 7 P.M., in the Town-Hall, Birmingham, by an address from the President, Lord Brougham. The body of the hall was crowded; and on the platform were, with others, Lord Brougham, Lord John Russell, Lord Stanley, the Mayor of Birmingham, Lord Hatherton, Lord Talbot, Sir Fitzroy Kelly, M.P., Sir J. Pakington, M.P., Major Talbot, Mr. Monckton Milnes, M.P., Right Honourable W. Cowper, M.P., Mr. C. B. Adderley, M.P., Mr. W. Scholefield, M.P., Colonel Gordon, M.P., Sir T. Winnington, M.P., Sir B. Brodie, Mr. W. H. Foster, M.P., Mr. W. Beale, M.P., Mr. R. Slaney, M.P., Sir J. Forbes, Mr. E. Akroyd, M.P., Mr. M. D. Hill, Recorder of Birmingham, Professor Pillans, Mr. Jelynger Symonds, Mr. W. Matthews, Rev. Dr. Badham, Rev. C. Kingsley, Mr. Robert Owen, Dr. Humphreys, Rev. S. Gedge, Mr. A. Hill, Rev. J. Turner, Rev. J. C. Miller, Mr. J. Sturge, Mr. Melville, Mr. A. Helps, Mr. Robert Chambers, Edinburgh, Rev. J. J. Field, Mr. D. Fleming, Rev. S. Carter, Rev. Mr. Collis, Sir Charles Hastings, Mr. R. W. Winfield, Mr. T. Bunce, etc.

In the course of the proceedings Mr. G. W. Hastings, the general secretary, read letters apologising for unavoidable absence from the Earl of Carlisle, the Bishop of Oxford, the Bishop of London, the Earl of Shaftesbury, the Solicitor-General, Mr. John Bright, Dr. Sutherland, Sir J. Kay Shuttleworth, the Rev. F. D. Maurice, Sir E. Wilmot, and Alderman Salomons.

INTRODUCTORY ADDRESS.

Lord Brougham commenced his address by contrasting the two great branches into which human knowledge might be divided; the science which deals with abstract truths—metaphysical philosophy; and the science which treats of real existences. The latter is eminently deserving of attentive study. It deals with practical objects—the laws which govern men's habits and the principles of human nature, upon which the structure of society and its movements depend, and respecting which safe conclusions can with certain limits be drawn. His lordship then went on to demonstrate how the study of political philosophy was facilitated by its facts being plain and tangible. It had struck observers as extraordinary, that the course should not have been taken in regard to moral and political science which has proved so advantageous for assisting the progress of inquiry in natural philosophy; and they have strongly recommended the plan of assembling together occasionally, perhaps periodically, the various individuals and bodies whose attention is devoted to the ascertainment, illustration, and general exposition of moral and political doctrines. It is very possible that in the end this object may be obtained, and that this Association may bear as wide a relation to moral and political science as the British Association, which has now been in successful action for more than a quarter of a century, does to mathematical and physical science. At present, however, a more limited view is taken. It is proposed that five of the most important branches of moral and political inquiry should be singled out—those which especially form the practical portions of social science—comprehending the plans, both in their details and in the principles that should govern them, for furthering the improvement and securing the stability of the social system; correcting the faults and supplying the defects of our institutions upon sound, rational, and temperate views; and rendering desperate all attempts either to check the progress of improvement or to gratify the wild desires of those who would destroy rather than amend; in a word, steering the middle course between those who regard all change as pernicious, and those whom no change will satisfy. But if the subjects are in some measure limited, the scope of deliberations is anything but narrow. It embraces the greatest temporal interests of mankind. He then proceeded to point out the advantages of bringing together those who devoted themselves to promote the inquiries and the measures connected with social improvement; both in the way of mutual help, and of comparing apparently different opinions, and separating and acting on those points on which agreement is found to exist. The beneficial effects of united action had been well illustrated by the operations of the Society for Diffusing Useful Knowledge, and of the Society for Promoting the Amendment of the Law. After some comments relating to legal and political matters, the President continued: Nor let the importance be lightly considered of diffusing among the various classes of the community the knowledge of the subjects to which our inquiries will be directed, and which, though all are alike interested in them, yet are by no means sufficiently understood or estimated at their just value by the bulk of mankind. The slowness with which the humbler classes of our fellow-citizens improve themselves in different branches of science, and, indeed, their reluctance to undergo the labour of studying them, has been often lamented, but without exciting the least surprise in those who duly considered the circumstances of the case. In the attempts that have been made for so many years to overcome such obstacles, and effect the more general diffusion of knowledge, the necessity has been too much overlooked of beginning with the upper classes. When these are well imbued with the taste for acquiring knowledge, they have a natural tendency to make those in other ranks partake of the same great benefits. It is not that the whole or even the greater part of one class will become educators; but some will be inspired with the desire, not more benevolent than wise, of bearing the torch to the regions still without those lights which they themselves enjoy. Thus is sound and useful instruction propagated by a sure and natural process. Knowledge thus diffused, but especially knowledge of social interests and rights and duties, even more than the firm and temperate distribution of justice itself, possesses the great, the cardinal virtue of insuring the stability of the social system. But this diffusion leads also to the improvement of the system, because it inspires all classes with the desire of promoting measures shown to be safe as well as effectual, in a word, wholesome reforms. Nor can anything be more groundless than the fears of progress entertained by some—affected by more. It is, in truth, ignorance continued, not knowledge advanced, which they have to fear—nay, which, when we come to an explanation with them, they really do fear. Knowledge is power; but its natural ally is the friendly power of virtue, with which its dominion is willingly shared. This is, above all, true of the knowledge which we shall seek to improve and to impart.

His Lordship sat down amidst loud and prolonged cheering.

Lord J. Russell, who was enthusiastically received, proposed the following resolution:—

"That the National Association for the Promotion of Social Science be inaugurated, and that the warmest thanks of this meeting be given to Lord Brougham for his excellent address."

His lordship expressed great gratification at seeing his noble friend in the enjoyment of so much health and strength, and now coming here to promote the welfare of his countrymen. Particularising the exertions which Lord Brougham had made throughout a long and laborious life to promote the diffusion of knowledge, his lordship said he was rejoiced now to hear that same voice which more than thirty years ago fulminated over Europe against unjust oppression, now exerted in promotion of the cause of social science. The task was a difficult one, but he trusted that the efforts of the association would tend alike to the advancement of knowledge, the benefit of the people, and the further extension of freedom.

The resolution was seconded by the Right Honourable Mr. Cowper, M.P., and supported by Mr. Recorder Hill.

After a few words of acknowledgment from Lord Brougham, Sir Fitzroy Kelly moved that a committee be appointed to report to the general meeting on Friday the constitution and future action of the National Association.

The resolution was seconded by Sir Charles Hastings, and supported by Mr. Akroyd, M.P.

Second Day.—Tuesday, October 13th.

This morning, at 11, the inaugural addresses of the five presidents of departments were delivered in succession in the Town-hall, before the whole of the members and their friends.

PUBLIC HEALTH.

Lord Stanley, president of this department, observed that, having met to discuss the present state and future prospects of sanitary science in England, the first thing for them to do was to define accurately what was meant by the term "sanitary science," and he apprehended that it meant that science which dealt with the preservation of health and prevention of disease in reference to the entire community, or to classes within that community, as contradistinguished from medical science in the ordinary acceptation of the term, which latter study had for its aim the restoration of health when lost, and dealt with the case of each individual separately. Or, to put it in another form, he would say that all physical evils to which human beings were liable might be classed under three heads: 1. Those which, whether limited to isolated cases or widely diffused, were not preventible beforehand by any means at present known, and could only be dealt with remedially when they arose. 2. Those which affecting individuals only, were preventible as regarded those individuals, but were not due to any general or wide-spreading cause. 3. Those which affected entire districts or entire classes of men, of which the cause lay in some known external noxious agency, whether connected with occupation or locality, and which could therefore be removed altogether by the removal of such agency. Of these three classes sanitary science, as he understood the term (the study of the public health), dealt not at all with the first, but partially with the second, and mainly, though not quite exclusively, confined itself to the third. After observing that the fundamental axiom which sanitarists laid down was, that of epidemic diseases some might be made, by proper appliances, to disappear altogether, while those that remained would exhibit a milder and less distinctive type; while a knowledge of physical laws would tend to a greatly improved state of the public health in respect to diseases not epidemic, he proceeded to enforce the necessity of a more general diffusion of knowledge upon these subjects, and to argue that our destiny in these matters was very much in our own hands. He then adduced a variety of facts to prove that sanitary neglect caused disease, and in order to show how vast a sacrifice of human life went on unchecked and almost unnoticed, though plainly within the power of society to abate, he instanced the case of the British army; not of regiments employed in foreign service or quartered in unhealthy climates, but the case of troops at home under the direct control of the executive. [Taking the deaths which occurred among men within the ages of military service,] we had a yearly average of civilians resident in towns of 11·9 per 1,000; while for the same ages among soldiers of the line there was an average of 17·8 per 1,000; and among the Guards of 20·4 per 1,000. He need not stop to inquire to what extent deficient ventilation, intemperate habits, or such causes, contributed to this result; but he proceeded to statistics to show how far mortality varied according to the salubrity or insalubrity of the district inhabited. Taking the same ages—namely, 20 to 35—we had an average of deaths per 1,000 as follows:—In the least healthy urban districts, 12·4; in the whole population of England and Wales, 9·2; in the rural population exclusively, 7·7. From a popular summary of facts which had been drawn up by the Manchester Sanitary Association, comparing deaths from pestilence with deaths from war, he found that during the Revolutionary war, in 22 years, from 1793 to 1815, there were killed 19,800 men, while in the single year 1848-49 there died of cholera and other epidemics 72,180. In those 22 years of war the wounded were 79,700, while in the one year of cholera those attacked were 144,860. The same authority added that the annual average of deaths in England and Wales due to preventible causes might be estimated at 115,000.

The noble lord proceeded to trace with great minuteness of detail the various causes of disease, showing at the same time how one breach of the natural law led to another. He then touched upon the law of density or aggregation, and the law of altitude as affecting disease, and upon the industrial pathology of trades, contending that the remedy was very much in the hands of individuals rather than in those of the government. He showed the necessity for remedial measures generally, but he urged that legislation was useless unless it met with the support of public opinion. Enlarging upon the importance of enforcing proper regulations for the management of lodging-houses, he recommended the construction of model dwellings, contending that they ought to be remunerative to those who erected them. He then advanced to the sewage question, with respect to which he said so much of late years had been spoken, and so little, comparatively speaking, done. It was better, however, of two evils to do nothing, than to do that which would have to be again undone. It seemed to him that any plans for improving our sewage system were very imperfect until we had ascertained what to do with the sewage when collected. [*Hear.*] That was a question which had not yet been satisfactorily solved. Mr. Austin, in his able report last year, gave the results of various experiments which had been tried in this direction, of which it might be said that several appeared promising, but that none had so decidedly succeeded as to justify its general adoption. It was clear, however, that neither the law nor public convenience nor public health would allow the poisoning of rivers and brooks, such as was now becoming common wherever in a large or moderate-sized town a complete system of drainage was established. Deodorisation by some means had become a necessity. If it could be combined with agricultural utility, so much the better; but this at least was certain, that whether the process paid or not, every local Board of Health, or other governing body, ought to be just as much bound to purify its sewage as to remove it. [*Hear, hear.*] No person and no community had the right merely to transfer a nuisance to their neighbours. [*Cheers.*] It was probable that in every case, by the payment of no very large sum, private speculators might be induced to undertake the work of deodorisation, and if this should be so, and if the experiments now going on in various places should be even moderately successful, we should probably find something better to do with the metropolitan drainage than to carry it into the sea at a cost of many millions without the prospect of the slightest return. [*Hear.*] Although great good had already been done by calling the notice of local bodies to nuisances within their jurisdiction, the further lesson remained to be taught that it was not enough to send those nuisances to a distance, and that the public was only benefited when they were put an end to altogether. The noble lord then touched upon questions affecting the sale of poison, adulterations, compulsory vaccination, State medicine and medical relief, and concluded an able address in the following terms:—

"There are other topics on which I wished to touch. I regret to leave unnoticed the legislation of successive Parliaments in regard to the Board of Health, the perpetually repeated conflict between central and local authority, the struggles, failures, and successes of the last few years; but time would fail. Brevity on such questions could not but lead to misunderstanding; fulness of treatment would be impossible; and to those whom I see around me I already owe a double apology; for, while lamenting the length to which these remarks of mine have extended, I lament still more that, compelled to touch as it were on the surface of many topics, I have been unable, both from limited space and limited knowledge, to do justice to any one. Only take with you this last word. Dry and unattractive as sanitary studies may appear, they belong to the patriot no less than the philanthropist; they touch very nearly the future prosperity and the national greatness of England. [*Hear, hear,*] Don't fancy that the mischief done by disease speeding through the community is to be measured by the number of deaths which ensue. That is the least part of the result. As in a battle, the killed bear but a small proportion to the wounded. It is not merely by the crowded hospitals, the frequent funerals, the destitution of families, or the increased pressure of public burdens, that you may test the suffering of a nation over which sickness has passed. The real and lasting injury lies in the deterioration of race, in the seeds of disease transmitted to future generations, in the degeneracy and decay which are never detected till the evil is irreparable, and of which, even then, the cause remains often undiscovered. It concerns us if the work of England be that of colonisation and of dominion abroad, if wild hordes and savage races are to be brought by our agency under the influence of civilised man, if we are to maintain peace, to extend commerce, to hold our own among many rivals, alike by arts and arms—it concerns us, I say, that strong hands shall be forthcoming to wield either sword or spade—that vigorous constitutions be not wanting to endure the vicissitudes of climate and the labours of a settler in a new country. I believe that, whatever exceptions may be found in individual instances, when you come to deal with men in the mass, physical and moral decay necessarily go together; and it would be small satisfaction to know that we had through a series of ages successfully resisted every external agency, if we learnt too late that that vigour and energy for which ours stands confessedly pre-eminent among the races of the world were being undermined by a secret but irresistible agency, the offspring of our own neglect, against which science and humanity had warned us in vain."

SOCIAL ECONOMY.

Sir B. Brodie, who has undertaken the presidency of the fifth department in the unavoidable absence of Lord Lyttelton owing to a domestic affliction, was next introduced to the meeting. In briefly reviewing the reforms which it was necessary to undertake in order to the advancement of the principles of social economy, he urged the necessity of looking below the surface, and taking a far more comprehensive view of these matters than persons were usually apt to do. For example, in considering the social evils to which the poorer portions of the public were more particularly liable, it would not be enough merely to endeavour to prevent drunkenness, but to take into view the whole question of the effect of drinking habits generally; they should then go to the educational section and ask for information as to the means provided for the intellectual instruction and amusement of the poor, and thence they should proceed to the sanitary section, and ascertain what measures were being adopted to secure the healthy and comfortable condition of the home of the working man. [*Hear, hear.*] The subjects which came within the purview of the social economy department were of a miscellaneous and almost a heterogeneous description; but having regard to that economy of time which was essential, he left these various subjects to be discussed more in detail in the section over which he was about to preside. Touching upon the question of public charities, Sir Benjamin observed that many of these institutions were open to the serious charge of paralysing that spirit of independence and self-reliance which was more valuable to a man than any amount of charity that could be given them. As an instance of this, he cited the case of a London parish, to which, within his own knowledge, persons removed for the express reason that large sums of money were given away there; while he knew that in other cases the existence of almshouses attracted to the parish numbers of the idle, dissolute, and worthless. He remarked, also, upon the large amount of money which was expended by many public charities in "establishment charges" before any of it was distributed to deserving objects; and in other cases upon the cost which poor persons had to incur before they could avail themselves of the benefits which the charities were calculated to confer. In conclusion, Sir Benjamin expressed a hope that the subject of our great public charities would ere long engage the attention of those who were competent to deal with them, and to propose a remedy for the existing evils.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

LETTER FROM RICHARD GRIFFIN, ESQ.

Sir,—I shall feel obliged by your inserting the following letter, which has many points of importance to the Poor-Law Medical Officer. During the last Session of Parliament, Lord Elcho, at my solicitation, kindly moved for certain returns. The queries are now in the course of circulation.

I trust my brethren will see that they are correctly answered, as upon the replies will depend the success or failure of our agitation for redress of grievances.

The precise wording of the questions has been slightly altered from the original, the half year's list substituted for the year's, and "the entries on the permanent list not to be reckoned" have been added, etc. The mode of filling up the answers 13 and 14 requires explanation, as many gentlemen have written to me on the subject. For each half year take all the cases under treatment at its commencement, and add to them all the fresh cases attended during the half year. For the calculation of the duration of illness, count up all the cases returned each week in the medical relief book for one year, and add them together, divide them by the number attended each half year, added together, which will give the number of weeks, multiply the remainder by 7 and divide again and it will give the days, say 4 weeks 5 days, or 33 days duration of illness. The returns formerly calculated by me averaged 28 days 1 hour.

I hope my medical friends will not forget their mite towards the testimonial now raising for our Irish brother, Dr. McCarthy, of Kenmare. I shall be happy to send a copy of his eloquent address to any gentleman who may desire to have one. Subscriptions of *5s.* may be forwarded to Charles Hewitt, M.D., Patrick's Hill, Cork. I am, etc.

RICHARD GRIFFIN.

12, Royal Terrace, Weymouth, October 5th, 1857.

"12, Royal Terrace, Weymouth, 29th September, 1857.

"My Lords and Gentlemen,—During many months, I have been attending a poor woman named Puckett, who had ulcerations of the integuments of the knee: and, latterly, dropsical swelling of the joint. A few weeks since, the sores having all healed, except one, she felt able to visit a relative in the country, and went thither in a waggon on a wet day, and caught cold, which induced inflammation of the joint, and subsequently the bursting of the dropsical swelling through the ulcerated opening; constitutional disturbance, threatening her life, was immediately set up, which rendered it necessary to be prepared at any moment to perform an operation. I therefore, under the head 'observations', made the following request in the district medical relief book:—

"'August 24th. An operation may be required; shall therefore feel obliged by an order for three medical men to assist; but it will not be used unless actually necessary.'

"The Board of Guardians thereupon ordered the relieving officer to furnish the required assistance when desired.

"On September 21st, Mr. Inspector Gulson attended the Board, and appended the following note to my request:—

"'Art. 178 of the regulations provides that the medical officer shall, at his own cost, obtain the advice of some surgeon or physician before performing an amputation; and the fee provided by art. 177, is understood to cover and provide for such assistance as the medical officer may require in the performance of the operation, in respect of which the fee is made payable. "'C. Gulson.'

"In consequence of this note, I am deprived of the requisite assistance to perform an operation, should one be necessary, which I much fear will be the case before long, though I am doing my utmost to save the limb.

"Art. 178 says, that 'except in cases of sudden accident immediately threatening life, no medical officer shall be entitled to receive such remuneration for any amputation, unless he shall have obtained, at his own cost, the advice of some member of the Royal College of Surgeons of London, or some fellow or licentiate of the Royal College of Physicians of London, before performing such amputation; and unless he shall also produce to the guardians a certificate from such member, or fellow, or licentiate, stating that in his opinion it was right and proper that such amputation should be then performed.'

"This article was evidently intended to prevent a limb being removed without due consideration—and nothing further. Your own instructional letter declares what the fee is for.

"'The payments for operations are limited to operations on out-door poor, and do not include those performed in the workhouse. It appears to the commissioners that the constant attendance at the house of the patient in severe surgical cases usually forms the most burthensome part of the extra services of the medical man: whereas the constant visits of the medical officer to the workhouse enable him to attend a patient in the workhouse without always making a visit for that express purpose.'

"Art. 179 corroborates the foregoing: 'Provided always that if in any case the patient has not survived the operation more than thirty-six hours, and has not required and received several attendances after the operation by the medical officer who has performed the same, such medical officer shall be entitled only to *one half* of the payments respectively prescribed above.'

"These quotations evidently prove that the extra remuneration for amputations is not for the performance of them, but for the advice and certificate of another medical man *before* the operation, and for the 'constant and burthensome attendance' *afterwards*. I therefore entreat your Honourable Board to allow me the assistance actually required to enable me to perform the operation, should it still be deemed necessary.

"Art. 177 distinctly says: 'No salary of any district medical officer shall include the remuneration for operations and services of the following classes performed by such medical officer in that capacity for any out-door pauper, but such operations and services shall be paid for by the guardians, according to the rates specified in the article.'

"Notwithstanding this article, which is of the most positive description, I am not allowed the fees mentioned therein—the guardians insisting that my miserable salary of 1*s.* 3½*d.* per case shall include the performance of operations; and Mr. Gulson now says it shall pay for assistance also: because, forsooth, former medical officers consented to commute the extras for a fixed salary, when they were annually elected, and were afraid of dismissal at the end of the year if they refused to do anything, and did not comply with everything, the guardians desired of them. I respectfully submit that this com-

mutation should never have been sanctioned by your Honourable Board, and ought now to be reversed—in the case of those officers, at least, who were not parties to it. See the result of it in my own case. Here is a poor woman who has been under my care from July 25th, 1856, up to this day, September 29th, 1857. I have already paid one hundred and nine visits to her house, causing me to walk more than one hundred and nine miles. I have given her seventy-two bottles of medicine, forty-two bottles of lotion, one bottle of liniment, three boxes of ointment, four boxes of pills, and a quantity of adhesive plaister; and if Mr. Inspector Gulson's views are correct, I am now called upon to pay one guinea each to three medical men, at least, to assist me to amputate or resect the joint, as may ultimately be determined; as my colleagues are not bound to give their valuable time gratuitously out of their district: in addition, I shall have to attend the patient some months afterwards. The world would probably fix a remuneration for these important services at not less than £50, and think it a reasonable amount; but you, my lords and gentlemen, have allowed the guardians to decree that I am to have no extra pay—that skill, labour, and expense, are all to be included in the munificent sum of one shilling and three-pence three-farthings, the proportion my niggardly salary allows for each case I am called upon to attend.

"The terms of the advertisement on which I was elected, are as follows: 'The above mentioned salaries to include the supply of all medicines and medical and surgical appliances, together with the extra fees for midwifery cases, fractures, etc.'

"As this paragraph says nothing about assistance, allow me to quote your letter to the guardians, January 28th, 1857, as it bears on the point. It alludes to a case of consultation, rendered necessary by the district medical officer, stating that he 'could do no more for his patient'.

"'On referring to Art. 215, No. 3, of the general Consolidated Order of the 24th July, 1847, the guardians will observe that it is the duty of the relieving officer, in any case of sickness or accident requiring relief by medical attendance, to procure such attendance, by giving an order on the district medical officer, or such other means as the urgency of the case may require. The board think that, looking to the duties of the relieving officer as prescribed by this article, it was competent to him to adopt the course which he pursued. The Board therefore direct me to inform the guardians, they are of opinion that he (Mr. Griffin) is entitled to be remunerated for the professional services which, by the authority of the relieving officer, acting on behalf of the guardians, he was called upon to render in this case.'

"In this letter you recognise the principle that where the district medical officer requires assistance, the relieving officer is justified in providing it. I cannot do impossibilities. I cannot administer chloroform, attend to the tourniquet, hold the limb and amputate at the same time, and subsequently take up the arteries and tie them. I require assistance, otherwise the life of my patient must be sacrificed. I therefore pray you will, without delay, instruct the guardians to direct their relieving officer to furnish me with the aid required.

"Since June 1855 I have addressed many letters to your Honourable Board, complaining of the inadequacy of my salary to the duties I am required to perform. You have generally promised that they shall receive your attention or consideration, but in your last reply a simple acknowledgment of my letter was alone vouchsafed. With your extensive correspondence, the complaints of a poor union medical officer are probably little heeded at the time and are soon forgotten. I will therefore just reiterate that I was elected one of your officers in March 1855, that my predecessor during the last year of his office recorded six hundred and forty-two cases, for which he received £110, or 3*s.* 5*d.* per case; when I accepted my appointment, I expected a remuneration per case to the same amount as that paid to him: judge then my surprise on discovering that my average payment for two years realised only 1*s.* 4½*d.* per case: during the last half year it has been rather less, as in that time I have attended three hundred and four orders, for which I shall receive only £17: 10: 0, whilst my predecessor had for the same number £52: 2: 1. I have also performed an operation of some importance—resection of the elbow joint of a woman aged 29, thereby saving the arm, which is every day becoming more useful to her, instead of removing the limb and rendering her chargeable to the parish for life. The trouble and expense of this case has been considerable, and it has been under treatment many months, indeed, all the sores are not yet healed; for this case I get nothing more than the 304th part of £17: 10: 0, or 1*s.* 1¾*d.* Compare this with the payments made to my colleagues, who have not performed any operations of importance during the last two years and a half (excepting in one instance, tapping a woman), whilst I have had to amputate a limb above the knee, remove part of a hand, a tumour of importance from a child's side, resect an elbow joint, and operate for strangulated hernia. One gentleman has a salary that gives him 2*s.* 2¼*d.* per order; a second, 4*s.* 11½*d.*; and a third, 14*s.* 7*d.*; while I have but 1*s.* 3¾*d.*

"My Lords and Gentlemen, I pray you will no longer permit me to be thus cruelly misused. The poor-rates of the country, as well as the payments from the consolidated fund, ought to be impartially, and not, as in my case, capriciously administered. On remonstrating privately with two members of the Board of Guardians on the iniquitous treatment I receive, one replied: 'I cannot help it; we are mere automatons; the Board above rules all.' The other said: 'Fixing the salaries rests with the Poor-Law Board and not with us,' which bears out the belief I previously expressed, that the law has entrusted to your Honourable Board the power to regulate our salaries (see 4 and 5 Will. IV, c. 76, s. 46). I entreat you, therefore, to remove the oppression under which I groan, and which I do not deserve. The only charge that can be brought against me is, that I seek a reform of the abuses that exist in the medical department of the Poor-Law. I desire only that the Poor-Law medical officers may be enabled to do their duty to the four millions of the labouring classes entrusted to their care. We live in an age of reform; the government of the country is called a reform government; the existence of your Honourable Board sprung from reform; surely, then, I ought not to be persecuted for humbly endeavouring to follow in the footsteps of the great men of this age. I beseech you to uphold me, by giving me a salary commensurate with the duties I have to perform. If you cannot do this I beg you will say so, that I may lay my case before counsel, and ascertain if it is probable the Court of Queen's Bench can afford me any redress; if not, I will then present an humble address to her Majesty in Council, and pray she will graciously be pleased to grant me assistance, that I may do my duty to her poor without robbing my family.

"I have the honour to be, my Lords and Gentlemen,
"Your most obedient servant,
"Richard Griffin.

"The Poor-Law Board."

FEES FROM ASSURANCE OFFICES.

Letter from W. Sankey, Esq.

Sir,—I have perused with much pleasure the communication of Dr. C. Radclyffe Hall, of Torquay, but regret he should have allowed the Unity Life Office to escape the payment of his legal fee.

I have now for upwards of forty years acted as medical referee for this town and neighbourhood, and have ever resisted the proffer of half-guinea fees; and, moreover, whenever my report has been sent in (ignorant of the intention on the part of the office to offer the half fee), I have insisted upon, and obtained, my legal demand of one guinea.

One of [illegible] instances that occurred, my fee was paid, but with an intimation that the office would in future not require my service[illegible]

I am, etc.,
William Sankey.

Dover, October [illegible] 1857.

FEES OF ASSURANCE OFFICES.

Sir,—The occasional behaviour of insurance offices towards members of our profession, as illustrated by the last two numbers of the Journal, deserves our serious consideration. Some of our brethren, I am well aware, consider this treatment just and honourable; in such opinions I cannot coincide, and I believe the holders of these opinions are mistaken. The views they urge are simply these.

The offices say, We have our own medical referee, who will examine you on our account, but we require you, the proposer, to bring a certificate of good health from your own private medical attendant. If this is honestly the position, why do the offices apply for it themselves, and state that the answers to the queries will be considered "*strictly confidential*"? In so doing, do they not wholly nullify the position? They thus make it a *personal favour* to themselves; they apply for it and, of course, under such circumstances, in all honesty should pay for it.

Again, they urge, life insurance is a mutual benefit, both parties have their duties to perform. Granted; but is the risk mutual? The fact that the *whole risk* from bad lives is on the side of the office is wholly ignored.

It may be justly asked, what right has any person to require from us information possessed by ourselves alone, obtained in the practice of our profession, required only because it is a professional opinion, valuable only in proportion to the professional acumen which marks it, acquired very probably at the risk of life, a life how valuable known only to those dependent on it for daily bread; yet this knowledge, possibly all-important to the office, and impossible often to obtain from any other source, is not worth the purchase, and is only obtained surreptitiously, if at all, in many cases.

On what grounds, too, is the assurer to provide and pay for this information, which may be so fatal to his chances of success, and prove the only stumbling block to his hopes? But supposing that this fatal information is given, is it not given too frequently at the loss of the practitioner, and for this, are we to receive no indemnity at the hands of the office, the only party in the transaction who is benefited thereby?

It appears to me the only safe and honest plan for offices to act as though they suspected imposition, and that therefore it is their duty, as undoubtedly it is their interest, to adopt every possible measure to discover such imposition, and to pay liberally for those efforts. Inconsistently enough, many offices reward handsomely solicitors and agents for business introduced by them, and yet without the medical information, for which payment is so frequently refused, that very business may be ruinous to the office, and valuable only to the proposer and agent—these offices having yet to learn the fact, that no outlay so well repays them as that spent in obtaining *healthy* lives, except that which is paid for the rejection of *diseased* proposals.

So many cases of this class having occurred, it would be well could some fixed rule be adopted. Is our Association powerless on such a topic as regards the behaviour of its members? Can it not, at least, recommend a plan which will be consonant with the dignity of our profession, and free from injustice towards any of the parties interested.

I am, etc., A Sufferer.

Oct. 12th, 1857.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

Colborne. On October 8th, at Chippenham, the wife of Wm. H. Colborne, M.D., of a daughter.

Croft. On October 9th, at 13, Camden Road Villas, the wife of *Robert C. Croft, Esq., Surgeon, of a daughter.

Mantell. On August 11th, at Balasore, Bengal, the wife of Alfred A. Mantell, M.D., of a son.

MARRIAGES.

Eddowes—Macaulay. Eddowes, Thomas Storer, Esq., of Sutton Coldfield, Warwickshire, to Margaret Anne, eldest daughter of *Thomas Macaulay, Esq., Surgeon, of Leicester, at St. Margaret's, Leicester, on October 13th.

Iliff—Moorsom. Iliff, William T., M.D., of Newington Place, London, to Marianne, eldest daughter of George Moorsom, Esq., Surveyor-General for Tonnage, Her Majesty's Customs, at Caldbeck, Cumberland, on October 10th.

O'Bryen—Graham. *O'Bryen, John, M.D., of Clifton, Bristol, to Celia, only daughter of the late Patrick Graham, Esq., of Worth Hall, Sussex, at Mount Plunkett, county Roscommon, on October 1st.

Read—Henderson. Read, William, Esq., of 3, Holles Street, Cavendish Square, to Jessie Mary, only child of the late — Henderson, M.D., H.E.I.C.S., at All Souls', Langham Place, on October 3rd.

Stevenson—Maning. Stevenson, Thomas, Esq., Surgeon, of Upper Grosvenor Street, to Emma Pauline, daughter of Charles James Maning, Esq., at Rothesay, Bute, on Oct. 5.

DEATHS.

Bailly, John, Esq., Surgeon, for upwards of fifty years a respected practitioner in Sutton St. Mary, Lincolnshire, aged 74, on October 4th.

Boyes, W. R., M.D., 1st Bengal Native Cavalry, massacred at Cawnpore, on June 27th; also Kate, his wife.

Bush, John Stafford, Esq., Assistant-Surgeon H.E.I.C. Madras Service, of remittent fever, after six days illness, at Kamptee, aged 30, on August 15th.

Curran, —, M.D., at Waterloo House, Dublin, aged 75, on October 2nd.

Luke. On October 8th, at Greenhithe, Richard Butler, eldest surviving son of James Luke, Esq., Surgeon to the London Hospital, aged 27.

Rennalls. On October 10th, at Woodside, near Lymington, Hants, Jane Flacon, widow of the late John Powell Rennalls, M.D., formerly of Jamaica, aged 75.

Sedgwick. On October 4th, Harriet Matilda, daughter of Charles Sedgwick, Esq., Surgeon, of Hollingbourne, Kent, aged 25.

PASS LISTS.

Royal College of Surgeons. Members admitted at the meeting of the Court of Examiners, on Friday, October 9th, 1857:—

Applin, Augustin Oliver, Army
Braden, John George, Commercial Road East
Ellis, James, St. Thomas's Hospital
Grabham, George Wallington, St. Thomas's Hospital
Lowe, John, Lynn Regis, Norfolk
Mansel, Thomas, Pembroke
Molyneaux, James, Manchester
Tench, Edward Bevan, Hereford

At the same meeting of the Court:—

Tronson, John Mortlock, of H.M.S. *Wellington*
Lewis, William Jarrett, of Haslar Hospital

Passed their examinations as Naval Surgeons. These gentlemen had previously been admitted members of the College: their diplomas bearing date respectively August 6th, 1852, and May 15th, 1854.

The Fellowship. The following members of the College, having been elected at previous meetings of the Council, were admitted to the Fellowship on the 8th inst.:—

Bunce, John Strudwicke, Woodford: diploma of membership dated February 23rd, 1838
Charles, Thomas, Sydney: April 15th, 1836
Chesshire, Edwin, Birmingham: August 9th, 1841
Gregory, John, Sunderland: June 27th, 1842
Holman, Henry Martin, Hurstpierpoint: June 27th, 1842
Isbell, Warren John, Stonehouse, Devon: November 10th, 1837
Kinsey, Robert Bancroft, H.E.I.C.S., Bengal: March 30th, 1838
Owen, Edwin Robert, Oxford: June 17th 1842
Ransom, Thomas William, Darlaston: March 4th, 1842
Robinson, Charles, Edgeware: May 20th, 1842
Rowland, Rowland, Strata Florida, Cardiganshire: May 17th, 1841
Russell, William Alexander, St. Albans: Jan. 8th, 1841
Wilson, Walter, Burton Crescent: December 4th, 1840

Apothecaries' Hall. Members admitted on Thursdays, October 1st and 8th, 1857:—

Wood, William, Middleton, near Beverley, Yorkshire
Foster, William Frederick, Hambledon, Hants
Wood, William, Wakefield, Yorkshire

University of Edinburgh. The following gentlemen obtained the degree of M.D. at the graduation on August 1st. Those to whose names triple asterisks are prefixed, obtained prizes for their dissertations; those with double asterisks, were selected for competition for the prizes; and those with single asterisks, were commended for their dissertations.

Scotland:

Beath, John Henry—On Chronic Lepra Tuberculosa
*Bell, Oswald Home—On Croup
*Campbell, Alexander Dugald—On General Paralysis o the Insane
Carfrae, George Mann—On Scarlet Fever
Carmichael, William—On Rheumatism
Clarkson, Eben—On the Actions and Uses of Tobacco
Clay, Robert Hogarth—On the Gastric Juice

**Coghill, John George Sinclair—On the Structural Relations of the Peripheral Nervous System
Cuthill, James—On Vital Statistics
*Don, William Gerard—On the Statistics of Life and Disease
Edie, Robert—On the Vital Force in Relation to Disease
*Forbes, David—On the Diagnosis of Local Tubercular Disease
**Gilchrist, William—On the Structure of the Spinal Cord
*Gourlay, Frederick—On the Theory of Vaccination
Gulland, Alexander Dudgeon—On the Diseases which were most prevalent in the Army of the East
Haig, William James—On the Causes of Hunger and Thirst
*Hargitt, Henry—On Scurvy
Hilson, Archibald Hamilton—On Inflammation of the Serous Membranes. (Dr. Hilson graduated on 24th March, 1827)
Inkson, James—On Pericarditis
Lidderdale, Robert—On Scarlatinal Dropsy
Macintyre, Alexander—On the Nervous System, and its Influence on the Organic Functions
Mackay, James—On Pneumonia
M'Kinnel, John—On Granular Degeneration of the Kidney
Maclaren, Peter Hume—On the Structure and Functions of the Human Placenta
*MacLaurin, Henry Normand—A Commentary on a Case in Medicine
Meikle, William—On some of the Actions and Uses of Water as a Therapeutic Agent
*Menzies, James—On the effects of Cold on the Human Body
*Milne, George Davidson—On the Anatomy, Physiology, and Pathology of the Biceps Flexor Cubiti
*More, James—On Psychical and Physical Life in relation to the Category of Time
Munro, Seymour Hugo—On Tetanus
Murray, John—On the Bite of Poisonous Serpents
Murray, Patrick—On the Influence of Alcohol as an Agent in Inducing Disease
Nichol, William—On Pus
Pagan, John Mackenzie—On the Tonic Treatment of Erysipelas
Park, James Hall—On the Diagnosis of Tubercular Diseases
Paterson, Alexander Stuart—On Malaria
Pow, Andrew—On the Causes and Cure of Ununited Fracture
Rattray, James Clerk—On the Anatomy and Development of the Placenta
*Scott, Thomas—On the Races of Men
*Simpson, David—On the Prostate, its Physiology and Pathology
Smart, Henry Sanderson—On the Physiological Action and Therapeutic Use of Cold and Warm Bathing
Smith, Philip Broke—On the Causes of Sudden Death
Surenne, James Gabriel—On the Iris
Turnbull, James Somerville—On the Fibrous Tissues
Watson, William—On Fœticide
Wield, David—On Natural Parturition
Woolley, George—On Vaccination
*Yellowlees, David—On Tracheotomy in Croup
**Young, John—On Acute Purpura
***Young, Peter—On the Development of the Eye in the Chick

From England:

*Bennet, Robert—On Facts in Therapeutics
**Cook, William Henry—On the Uterine Leech
*Duffin, Alfred Baynard—On the Pathological and Dynamic Relations of the Eruptive Powers
Frodsham, John Mill—On the Origin of Contractility of Muscular Fibre
Galloway, James—On the Connection between Pulmonary and Cardiac Diseases
Guy, William—On Hysteria
Hill, William Robinson—On the History of some of the Vegetable Tonics
Irving, James—On the Causes of the Circulation
*Jackson, Robert Edmund—On Climate, Health, and Disease
Law, John—On the Temperature of the Human Body
*Lowe, John—On Strychnia
Metcalfe, John Augustus—Can Physical Configuration and Habits descend to Offspring?
Miller, Ebenezer—On Hydrophobia
Miller, James William—On the Diagnosis of Local Tubercular Disease
*Morris, John Thomas—On the Pathology of the Urine
Paxton, James—On Ovarian Dropsy
*Riding, William Steer—On Cancer of the Lung
Stilwell, Henry—On Epilepsy
***Turle, James—On Fractures of the Humerus, and on the Treatment of Fractures in General
Walker, Arthur Abney—On the Comparative Anatomy of the Organ of Hearing in Man and the Lower Animals
Walker, Henry—On the Pathology and Treatment of Gout
Wheatley, Thomas Dalemain—On Phlebitis
Williamson, John Edwin—On the History, Diagnosis, and Treatment of Primary Syphilis
*Williamson, John Newby—On Uterine Hæmorrhage
Wingett, William Browne—On Chloroform

From Ireland:

**Gracey, Alexander Leslie—On Infanticide
Moore, George Bartley—On Retention of Urine

From Australia:

Cox, James Charles—On Icterus Neonatorum
Williamson, Walter—On some Diseases of the Knee-Joint

From Van Diemen's Land:

Wright, Daniel—On some Forms of Articular Disease

From the Island of Ceylon:

Aserappa, Simon de Melho—On Cancer Uteri

From the East Indies:

Cumming, William James—On the Morbid Anatomy and Causes of Apoplexy
Giraud, Byng Thomas—On Functional Diseases of the Heart
Howison, William Young—On Intermittent Fever
*Pemberton, John M'Leod—On Certain Forms of Insanity

From New Grenada:

Dawson, John J.—On Intermittent Fever

From Jamaica:

Todd, William Henry—On Podophylline and its Source
Hamilton, George Albert—On Epidemics

From the West Indies:

***Sutherland, George Sackville—On Malarial Fever

From Nova Scotia:

*Davies, William Henry—On Uterine Hæmorrhage

From New Brunswick:

*Osborne, Robert—On Yellow Fever
Land, John Coates—On Puerperal Mania

From Canada:

Doran, James—On Struma
Sewell, James Arthur—On Typhus Fever. (Dr. Sewell graduated on 19th September, 1856)

HEALTH OF LONDON:—WEEK ENDING OCTOBER 10TH, 1857.

[From the Registrar-General's Report.]

The total number of deaths registered in London in the week that ended on Saturday (October 10th), is 993. In the ten years 1847-56, the average number of deaths in the weeks corresponding with last week was 1007; but as the deaths of last week occurred in an increased population, it is necessary, with a view to comparison, to raise the average in proportion to the increase, in which case it will become 1108. The public health is therefore so far in a satisfactory state that the number of deaths last week was less by about a hundred than would have occurred under the average rate of mortality as derived from the early part of October in former years. The excess of births over deaths is 375.

Diarrhœa, which was so prominent during the summer, is now reduced nearly within its ordinary limit, and, as compared with other diseases of the zymotic class, is third in the order of mortality. Typhus was fatal last week in 57 cases, scarlatina in 52, diarrhœa in 41, hooping-cough in 26, measles in 21, croup in 13, dysentery in 12, small-pox in 3, and cholera in 1. The single case of cholera occurred to a girl of 13 years, at 3, Fisher's Alley, Spitalfields; the illness was of five days duration, and terminated in consecutive fever. Four of the deaths

from scarlatina occurred in the district of Hampstead: of these, two at 16, New End; four of those from measles occurred in the sub-district of Gray's Inn Lane. Cancer was fatal in 19 cases; 8 women died of diseases incidental to child-bearing; 8 infants of inanition and want of breast-milk. A woman in Wandsworth was poisoned by muscles. The four persons whose deaths are returned for the week, and who stand highest in point of longevity, are all widows, two of whom had attained the age of 90 years, one of 91 years, and the oldest is a centenarian, whose reputed age is 102 years. The death of the last occurred at 22, Red Lion Street, Clerkenwell.

Last week the births of 690 boys and 678 girls, in all 1368 children, were registered in London. In the ten corresponding weeks of the years 1847-56, the average number was 1397.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·357 in. The highest barometrical reading was 29·75 in., at the beginning of the week; the instrument fell to 28·67 in., its lowest point, on Thursday. The mean temperature of the week was 50·7°, which is 1·6° below the average of the same week in 43 years (as determined by Mr. Glaisher). The mean daily reading was below the average till Saturday. The highest temperature in the shade occurred on Wednesday, and was 63·4°; the lowest was 41·9°, on Monday. The entire thermometrical range was therefore 21·5°. The mean dew-point temperature was 47·9°, and the difference between this and the mean temperature of air was only 2·8°. The wind was generally in the south-west on the first three days, and was very variable afterwards. There was rain on almost every day; the amount measured was 0·83 in., a great part of which fell on Wednesday and Thursday.

According to an analysis which has been made by Dr. Robert Dundas Thomson, at St. Thomas's Hospital, the composition of the Southwark Company's water taken from the stand-pipe at the cabstand opposite the hospital, was in August 16·28 grs. of total impurity per gallon, of which 1·08 grs. were organic matter. On 7th September, the total amount of impurity was 75·56 grs. per gallon, and of this 5·66 grs. were organic matter. This water in September 1857 was as impure as the dirty water which was supplied to the inhabitants of London in former years, when the water was taken from the Thames at Vauxhall.

Fourteen thousand two hundred and fifty nine persons died in the quarter that ended September 26th. The number exceeds by nearly 200 that of the same period in 1856. But if diarrhœa had not prevailed more in the past summer than it did in 1856, other conditions being unaffected, the present returns would have indicated a superior degree of health. In the last three summers the total deaths were (taking them in the order of time) 13,042, 14,066, 14,259; and the deaths from diarrhœa were 1,258, 1,610, 2,343. The influence of a particular disease in raising the total mortality, which would otherwise be stationary or depressed, is palpable in these numbers; and a like increase is traced in the deaths attributed to complaints of a kindred character, and to some sporadic diseases affecting the alimentary system. Dysentery was fatal in the three summers to 46, 73, and 84 persons; cholera to 106, 131, and 177 persons. To tabes mesenterica 262, 284, 333 deaths are referred; to diseases of the liver 122, 143, 187; and under teething, though the number decreased in 1856 from 141 to 122, it rose this summer to 163. The unusual heat experienced in the first months of the quarter, co-operating with agencies that are more under control, has perhaps been mainly efficacious in producing these results; but with the knowledge that cholera has been lately infesting parts little removed from our coast, it may be conjectured that the epidemic virus extended itself in a milder form beyond the immediate field of action, its advance *in force* being only a question of time and opportunity. The speculation may be futile, but the facts must be admitted, and supply a more than sufficient motive for preparation.

The heat of the last quarter is its most striking meteorological feature, and will be described by stating that the mean temperature was 63·6°, which is 3·5° above the average, and that there was an excess of the mean temperature above its average in 12 weeks out of the 13, and on 71 days out of the 91. The result is a reduction in the mortality of pulmonary diseases, particularly bronchitis and pneumonia; and it will be seen also that cephalitis, apoplexy, and paralysis were less fatal than usual.

Sanitary Progress. The Town Council of Tynemouth, as the Local Board of Health, are adopting prudent measures for the conservancy of the public health. Labourers are cleansing out all the back lanes and alleys in the borough, and an ample supply of quick-lime is kept in depôts in various parts of the town, which is furnished to the labouring classes free of cost for whitewashing. The common lodginghouses are also put under the surveillance of the police, and overcrowding is carefully prevented. Sailors' lodgings are also now licensed. Since 1853 this borough has been thoroughly drained by a system of main sewerage, laid down at a considerable outlay, under the the inspection of a surveyor belonging to the General Board of Health. All the parish graveyards have been closed, and a new general cemetery belonging to the borough has been opened in the suburbs. Since the sewerage has been completed, typhus and other fevers are reported to be less common and fatal. It will be remembered that, while Tynemouth escaped the cholera in 1853—for the six deaths reported were cases brought from Newcastle to the seaside—the village of Howdon Pans was nearly decimated by it. The older portion of Howdon is exceedingly unhealthy; and the River Tyne Commissioners, who hold the principal portion of the property, are about to level it, and raise it and build streets of new and commodious houses. The village will also be well drained. Howdon has had three visitations of cholera. On each occasion the disease, before it became epidemic, entered one particular tenement in an old house, and struck down its first victim. A brief enumeration of a few facts will show what was the result of a little timely precaution, and the exercise of magisterial power in South Shields in 1853. In 1849, cholera broke out in a most malignant form in the common lodging-houses of one particular locality in South Shields—Union Alley. The inmates nearly all perished on that occasion, and the police were obliged to burn the furniture and shut the house up, to prevent the epidemic extending. A short time previous to the appearance of cholera in 1853 in Newcastle-on-Tyne, those lodginghouses were brought under the Common Lodginghouse Act. They were licensed, the number of inmates limited, and they were inspected nightly by the police. The result was most striking. Other dwellings were visited by the cholera in 1853 in this locality and other poor districts of South Shields, and several of their inmates perished; but during the whole of the fearful autumn of 1853, and though scores of poverty-stricken people came direct from the worst infected districts of Newcastle to lodge, not a single death occurred in any of the common lodginghouses of South Shields from cholera.

The Cholera. We know now what class of persons will furnish by far the greater number of victims to cholera, and on what street—it may almost be said on what house—it will descend. The season at which its appearance may be expected is a subject of somewhat less certainty; but the unimportant doubt to which it is open cannot be supposed to affect the necessity of our precautions. On one occasion, after manifesting itself at Hamburgh in September, it has been among us in November; while, on others, it has been held in check for a time by the early advent of a cold season, only to break out at the beginning of the following summer. We cannot predict which precedent will be followed now, but we know that the disease will come; and we can lay our fingers, without the slightest liability to error, on the weak places which it will assail and invest. Were any experienced officer of health to go, for instance, through Manchester, he could mark out every square yard of space on which the disease will probably settle, and trace the course which it will take as soon as the congenial season gives the signal for its rising. If such knowledge as this had been imparted to us without power of averting the danger we must foresee, it is hardly possible that a greater curse could have descended upon man. So far, however, is this terrible state of impotent anticipation from being our real condition, that just as surely as we know when the cholera will burst forth from its smouldering ashes, and where it will make its most destructive ravages, so surely we know how to check its appearance in some quarters, and mitigate its force in all; and the precautions which we may adopt for this purpose will not be superfluous if the visitation which we apprehend should be withheld, inasmuch as they will bar the progress of other diseases which are never absent from among us, and increase the moral as well as the physical wellbeing of society. (*Manchester Guardian.*)

University of Oxford. A Convocation will be holden on Tuesday, the 27th inst., at 2 o'clock, for the purpose of electing a Clinical Professor on the Foundation of Lord Lichfield, in the room of the late Dr. Ogle.